

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds  
(without alignments)  
11150.034 Million cell updates/sec

Title: US-09-285-306-1  
Perfect score: 705  
Sequence: 1 ccagagagtgaggcgatc.....ggcgatcgacggcgagcgt 705

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:\*  
1: /cgn2\_6/prodata/1/ina/5A\_COMB.seq:\*  
2: /cgn2\_6/prodata/1/ina/5B\_COMB.seq:\*  
3: /cgn2\_6/prodata/1/ina/6A\_COMB.seq:\*  
4: /cgn2\_6/prodata/1/ina/6B\_COMB.seq:\*  
5: /cgn2\_6/prodata/1/ina/PCTUS\_COMB.seq:\*  
6: /cgn2\_6/prodata/1/ina/backfileseq1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	706	3	US-08-797-812-24
2	697.4	98.9	4403765	3	US-09-103-840A-2
3	697.4	98.9	4411529	3	US-09-103-840A-1
4	626.8	88.9	970	1	US-08-250-030-1
5	626.8	88.9	970	5	PCT-US95-06790-1
6	620	87.9	620	2	US-08-757-653-135
7	620	87.9	620	2	US-08-757-653-138
8	620	87.9	620	3	US-08-520-946-135
9	620	87.9	620	3	US-08-520-946-138
10	620	87.9	620	4	US-09-655-378A-135
11	620	87.9	620	4	US-09-655-378A-138
12	618.4	87.7	620	2	US-08-757-653-136
13	618.4	87.7	620	2	US-08-757-653-137
14	618.4	87.7	620	2	US-08-757-653-139
15	618.4	87.7	620	2	US-08-757-653-140
16	618.4	87.7	620	3	US-08-520-946-136
17	618.4	87.7	620	3	US-08-520-946-137
18	618.4	87.7	620	3	US-08-520-946-139
19	618.4	87.7	620	3	US-08-520-946-140
20	618.4	87.7	620	4	US-09-655-378A-136
21	618.4	87.7	620	4	US-09-655-378A-137
22	618.4	87.7	620	4	US-09-655-378A-139
23	618.4	87.7	620	4	US-09-655-378A-140
24	546.4	77.5	3447	2	US-08-313-185-57
25	546.4	77.5	3447	3	US-08-313-185-57
26	452.2	64.1	706	3	US-09-082-614A-57
27	385.4	54.7	5099	4	US-09-887-052-21

## ALIGNMENTS

RESULT 1  
US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC Compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/797,812  
; FILING DATE: 07-FEB-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/017,765  
; FILING DATE: 15-MAY-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/629,031  
; FILING DATE: 08-APR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/012,631  
; FILING DATE: 01-MAR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/011,339  
; FILING DATE: 08-FEB-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fitts, Renee A.  
; REGISTRATION NUMBER: 35,136  
; REFERENCE/DOCKET NUMBER: 16528X-018550  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-326-2400  
; TELEFAX: 415-326-2422

28 383.8 54.4 5099 4 US-09-887-052-3 Sequence 3, Appli  
29 383.8 54.4 5099 4 US-09-887-052-5 Sequence 5, Appli  
30 360.4 51.1 4227 4 US-09-902-540-8919 Sequence 8919, Ap  
C 31 360.4 51.1 9367 4 US-09-902-540-951 Sequence 951, App  
C 32 356.8 50.6 4074 4 US-09-252-991A-4737 Sequence 4737, Ap  
33 356.8 50.6 4092 4 US-09-252-991A-4771 Sequence 4771, Ap  
34 333.4 47.3 432 2 US-08-313-185-59 Sequence 59, Appl  
35 333.4 47.3 432 3 US-09-082-614A-59 Sequence 59, Appl  
C 36 318 45.1 4083 4 US-09-489-039A-22 Sequence 22, Appl  
37 318 45.1 4206 4 US-09-489-039A-30 Sequence 30, Appl  
38 261.6 37.1 329 3 US-08-750-088A-34 Sequence 34, Appl  
39 261.6 37.1 329 3 US-09-722-319-34 Sequence 34, Appl  
40 255.6 36.3 4167 4 US-09-543-681A-3177 Sequence 3177, Ap  
41 254 36.0 3612 4 US-09-583-110-973 Sequence 973, App  
42 254 36.0 3651 4 US-09-107-433-1652 Sequence 1652, Ap  
43 252.4 35.8 2964 4 US-09-540-236-1097 Sequence 1097, Ap  
C 44 252.4 35.8 14672 3 US-08-961-527-111 Sequence 111, App  
45 252.4 35.8 31063 4 US-09-596-002-20 Sequence 20, Appl

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; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 706 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-797-812-24

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Query Match      100.0%; Score 705; DB 3; Length 706;
Best Local Similarity 100.0%; Pred. No. 2.3e-153;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGAGGCGATCACACGCGAGACGTTGATCAACATCCGCGCGGTGGTGGCGG 60
DB 2 CCCAGGACGTGAGGCGATCACACGCGAGACGTTGATCAACATCCGCGCGGTGGTGGCGG 61

QY 61 CGATCAAGGAGTCTTTCGGCACGACGACGACGACGACGACGACGACGACGACGACGAC 120
DB 62 CGATCAAGGAGTCTTTCGGCACGACGACGACGACGACGACGACGACGACGACGACGAC 121

QY 121 TGTTCGGGTTGACCCACACAGCGCGACGACGACGACGACGACGACGACGACGACGACG 180
DB 122 TGTTCGGGTTGACCCACACAGCGCGACGACGACGACGACGACGACGACGACGACGACG 181

QY 181 AGCGTGC CGCGGTGAGGTCGCGACGACGACGACGACGACGACGACGACGACGACGACG 240
DB 182 AGCGTGC CGCGGTGAGGTCGCGACGACGACGACGACGACGACGACGACGACGACGACG 241

QY 241 TCGAAACCCCTGAGGGGCCAAACATCGGTCGATCGGTCGATCGGTCGATCGGTCGATCG 300
DB 242 TCGAAACCCCTGAGGGGCCAAACATCGGTCGATCGGTCGATCGGTCGATCGGTCGATCG 301

QY 301 TCAACCCGTTCCGGTTCATCGAAACGCGGTACCGCAAGGTGGTTCGACGCGGTGGTAGCG 360
DB 302 TCAACCCGTTCCGGTTCATCGAAACGCGGTACCGCAAGGTGGTTCGACGCGGTGGTAGCG 361

QY 361 ACGAGATCGGTACCTGACCGCGGACGAGGAGGACCGCACCTGCTGGTGGCACAGGCCAATT 420
DB 362 ACGAGATCGGTACCTGACCGCGGACGAGGAGGACCGCACCTGCTGGTGGCACAGGCCAATT 421

QY 421 CGCCGATCGATCGGACGCGTTCGTCGACGCGCGCGTCTGTCGCGCGCGCGCGCGCGCG 480
DB 422 CGCCGATCGATCGGACGCGTTCGTCGACGCGCGCGTCTGTCGCGCGCGCGCGCGCGCG 481

QY 481 GCGAGGTGAGTACGTCGCTCTGAGGTGGAATTCCTTCTGAGGACGACGACGACGACGAC 540
DB 482 GCGAGGTGAGTACGTCGCTCTGAGGTGGAATTCCTTCTGAGGACGACGACGACGACGAC 541

QY 541 TGGTGTGCGGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACGAC 600
DB 542 TGGTGTGCGGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACGAC 601

QY 601 TCATGGGGGCAAAATGACGAGCGCAGGCGCGTCTGTCGTCGTCGTCGTCGTCGTCGTCG 660
DB 602 TCATGGGGGCAAAATGACGAGCGCAGGCGCGTCTGTCGTCGTCGTCGTCGTCGTCGTCG 661

QY 661 TGGGCACCGGGATGGAGCTGCGCGGCGGATCGACGCGCGACGT 705
DB 662 TGGGCACCGGGATGGAGCTGCGCGGCGGATCGACGCGCGACGT 706

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RESULT 2

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US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TUBERCULOSIS

```

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; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

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Query Match      98.9%; Score 697.4; DB 3; Length 4403765;
Best Local Similarity 99.9%; Pred. No. 6.7e-151;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGAGGCGATCACACGCGAGACGTTGATCAACATCCGCGCGGTGGTGGCGG 60
DB 762963 CCCAGGACGTGAGGCGATCACACGCGAGACGTTGATCAACATCCGCGCGGTGGTGGCGG 763022

QY 61 CGATCAAGGAGTCTTTCGGCACGACGACGACGACGACGACGACGACGACGACGACGAC 120
DB 763023 CGATCAAGGAGTCTTTCGGCACGACGACGACGACGACGACGACGACGACGACGACGAC 120

QY 121 TGTTCGGGTTGACCCACACAGCGCGACGACGACGACGACGACGACGACGACGACGACG 180
DB 763083 TGTTCGGGTTGACCCACACAGCGCGACGACGACGACGACGACGACGACGACGACGACG 180

QY 181 AGCGTGC CGCGGTGAGGTCGCGACGACGACGACGACGACGACGACGACGACGACGACG 240
DB 763143 AGCGTGC CGCGGTGAGGTCGCGACGACGACGACGACGACGACGACGACGACGACGACG 240

QY 241 TCGAAACCCCTGAGGGGCCAAACATCGGTCGATCGGTCGATCGGTCGATCGGTCGATCG 300
DB 763203 TCGAAACCCCTGAGGGGCCAAACATCGGTCGATCGGTCGATCGGTCGATCGGTCGATCG 300

QY 301 TCAACCCGTTCCGGTTCATCGAAACGCGGTACCGCAAGGTGGTTCGACGCGGTGGTAGCG 360
DB 763263 TCAACCCGTTCCGGTTCATCGAAACGCGGTACCGCAAGGTGGTTCGACGCGGTGGTAGCG 360

QY 361 ACGAGATCGGTACCTGACCGCGGACGAGGAGGACCGCACCTGCTGGTGGCACAGGCCAATT 420
DB 763323 ACGAGATCGGTACCTGACCGCGGACGAGGAGGACCGCACCTGCTGGTGGCACAGGCCAATT 420

QY 421 CGCCGATCGATCGGACGCGTTCGTCGACGCGCGCGTCTGTCGCGCGCGCGCGCGCGCG 480
DB 763383 CGCCGATCGATCGGACGCGTTCGTCGACGCGCGCGTCTGTCGCGCGCGCGCGCGCGCG 480

QY 481 GCGAGGTGAGTACGTCGCTCTGAGGTGGAATTCCTTCTGAGGACGACGACGACGACGAC 540
DB 763443 GCGAGGTGAGTACGTCGCTCTGAGGTGGAATTCCTTCTGAGGACGACGACGACGACGAC 540

QY 541 TGGTGTGCGGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACGAC 600
DB 763503 TGGTGTGCGGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACGAC 600

QY 601 TCATGGGGGCAAAATGACGAGCGCAGGCGCGTCTGTCGTCGTCGTCGTCGTCGTCGTCG 660
DB 763563 TCATGGGGGCAAAATGACGAGCGCAGGCGCGTCTGTCGTCGTCGTCGTCGTCGTCGTCG 660

QY 661 TGGGCACCGGGATGGAGCTGCGCGGCGGATCGACGCGCGACGT 699
DB 763623 TGGGCACCGGGATGGAGCTGCGCGGCGGATCGACGCGCGACGT 763661

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RESULT 3

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US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:

```

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; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      98.9%; Score 697.4; DB 3; Length 4411529;
Best Local Similarity 99.9%; Pred. No. 6.7e-151;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACCCGACGCTTGATCAACATCCGGCCGGTGGTCCCG 60
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|
|
Db 761003 CCAGGACGTGGAGGCGATCACCCGACGCTTGATCAACATCCGGCCGGTGGTCCCG 761062
|
|
|
QY 61 CGATCAAGGAGTTCTTCGGACACGACGCTGAGCCAAATTCATGGACGAAACACCCGC 120
|
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|
Db 761063 CGATCAAGGAGTTCTTCGGACACGACGCTGAGCCAAATTCATGGACGAAACACCCGC 761122
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QY 121 TGTCCGGGTTGACCCAAAGCGCGACTGTCGCGCTGGGGCCCGCGTCTGTACG 180
|
|
|
Db 761123 TGTCCGGGTTGACCCAAAGCGCGACTGTCGCGCTGGGGCCCGCGTCTGTACG 761182
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QY 181 AGCGTCGCGGCTGGAGGTCGCGAGCTGCACCCGTCGCACTACGCGCGGATGCCCCA 240
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|
|
Db 761183 AGCGTCGCGGCTGGAGGTCGCGAGCTGCACCCGTCGCACTACGCGCGGATGCCCCA 761242
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|
|
QY 241 TCGAAACCCCTGAGGGGCGCAACATCGTCTGATCGGCTCGCTGTGGTGTACGCGCGG 300
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|
|
Db 761243 TCGAAACCCCTGAGGGGCGCAACATCGTCTGATCGGCTCGCTGTGGTGTACGCGCGG 761302
|
|
|
QY 301 TCAACCCGTTCCGGTTTCATCGAAACCGCTACCGCAAGGTGTCGACGCGGTGTTAGCG 360
|
|
|
Db 761303 TCAACCCGTTCCGGTTTCATCGAAACCGCTACCGCAAGGTGTCGACGCGGTGTTAGCG 761362
|
|
|
QY 361 ACAGATCGTGTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGTGACAGGCCAATT 420
|
|
|
Db 761363 ACAGATCGTGTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGTGACAGGCCAATT 761422
|
|
|
QY 421 CGCGGATCGATGCGGAGCGTTCGTTGAGCGCGCGCTGCTGTGGTTCGCGCGGCAAGCGG 480
|
|
|
Db 761423 CGCGGATCGATGCGGAGCGTTCGTTGAGCGCGCGCTGCTGTGGTTCGCGCGGCAAGCGG 761482
|
|
|
QY 481 GCGAGTGGAGTACGTGCTCTGAGTGAGTGACTACATGACGCTCGCCCGCCGACGA 540
|
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|
Db 761483 GCGAGTGGAGTACGTGCTCTGAGTGAGTGACTACATGACGCTCGCCCGCCGACGA 761542
|
|
|
QY 541 TGTGTGCGTGGCCACCGGATGATTCCCTTCTGAGGACGACGACGACGCAACCGTGCC 600
|
|
|
Db 761543 TGTGTGCGTGGCCACCGGATGATTCCCTTCTGAGGACGACGACGACGCAACCGTGCC 761602
|
|
|
QY 601 TCAATGGGGCAACATGACGCGCAGCGGTGCGCTGCTGCTGCTAGCAGGCGCGCTGG 660
|
|
|
Db 761603 TCAATGGGGCAACATGACGCGCAGCGGTGCGCTGCTGCTGCTAGCAGGCGCGCTGG 761662
|
|
|
QY 661 TGGGACCCGGGATGGAGCTGCGCGCGCGATGACCGCG 699
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Db 761663 TGGGACCCGGGATGGAGCTGCGCGCGCGATGACCGCG 761701
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RESULT 4
US-08-250-030-1
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; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match      88.9%; Score 626.8; DB 1; Length 970;
Best Local Similarity 99.7%; Pred. No. 2.6e-135;
Matches 628; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGGATCACCCGACGACGTTGATCAACATCCGGCCGGTGGTCCCG 60
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|
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Db 341 CCCAGACGTGAGGCGGATCACCCGACGACGTTGATCAACATCCGGCCGGTGGTCCCG 400
|
|
|
QY 61 CGATCAAGGAGTTCTTCGGCACCCAGCCAGCTGAGCCAAATTCATGACGACGAAACCCGC 120
|
|
|
Db 401 CGATCAAGGAGTTCTTCGGCACCCAGCCAGCTGAGCCAAATTCATGACGACGAAACCCGC 460
|
|
|
QY 121 TGTCCGGGTTGACCCCAAGCGCCGACTGTTCGGCGCTGGGGCCCGCGGCTGTGTACGCTG 180
|
|
|
Db 461 TGTCCGGGTTGACCCCAAGCGCCGACTGTTCGGCGCTGGGGCCCGCGGCTGTGTACGCTG 520
|
|
|
QY 181 AGCGTCCCGGGTGGAGGTTCGCGACGTGCAACCCGTGCACTACGCGCGGATGTCGCCGA 240
|
|
|
Db 521 AGCGTCCCGGGTGGAGGAGCGCGACGTGCAACCCGTGCACTACGCGCGGATGTCGCCGA 580
|
|
|
QY 241 TCGAAACCCCTGAGGGGCGCAACATCGGCTCTGATCGGCTCGCTGTGTCGTCGCGCGG 300
|
|
|
Db 581 TCGAAACCCCTGAGGGGCGCAACATCGGCTCTGATCGGCTCGCTGTGTCGTCGTCGCGG 640
|
|
|
QY 301 TCAACCCGTTCCGGTTTCATCGAAACCGCTACCGCAAGTGGTTCGACGCGCTGGTTAGCG 360
|
|
|
Db 641 TCNACCCGTTCCGGTTTCATCGNAAACCGCTACCGCAAGTGGTTCGACGCGCTGGTTAGCG 700
|
|
|
QY 361 ACAGATCGTGTACCTGACCGCGCAGGAGGACCGCCACGTCGTGGCAGAGGCCAATT 420
|
|
|
Db 701 ACAGATCGTGTACCTGACCGCGCAGGAGGACCGCCACGTCGTGGCAGAGGCCAATT 760
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|
QY 421 CGCGGATCGATGCGGACGCGTCTGTCGAGCCCGCGCTGTGTGTCCGCGCAAGGCGG 480
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Db 761 CGCCGATGATCGGACGGTCTTCTGTCAGCGCGGTCTGTGTCGCCGCAAGGCGG 820  
Qy 481 GCGAGGTGAGTACGTGCTCTGAGGTGAGTACATGAGCGTCTGCCCGCCGAGA 540  
Db 821 GCGAGGTGAGTACGTGCTCTGAGGTGAGTACATGAGCGTCTGCCCGCCGAGA 880  
Qy 541 TGTGTGCGGTGCGCCAGCGGATGATTCCCTTCTGAGCACGACGACGACCGTGGCC 600  
Db 881 TGTGTGCGGTGCGCCAGCGGATGATTCCCTTCTGAGCACGACGACGACCGTGGCC 940  
Qy 601 TCATGGGGCAAAACATGACGCCAGCGGCGG 630  
Db 941 TCATGGGGCAAAACATGACGCCAGCGGCGG 970

## RESULT 5

PCT-US95-06790-1  
; Sequence 1, Application PC/TUS9506790  
; GENERAL INFORMATION:  
; APPLICANT: Mayo Foundation for Medical Education and Research  
; APPLICANT: and Hoffmann-La Roche Inc.  
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
; TITLE OF INVENTION: Resistance to Rifampin  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Schwegman, Lundberg & Woessner  
; STREET: 3500 IDS Center  
; CITY: Minneapolis  
; STATE: MN  
; COUNTRY: USA  
; ZIP: 55402  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US95/06790  
; FILING DATE: 26-MAY-1995

CLASSIFICATION:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Raasch, Kevin W.  
; REGISTRATION NUMBER: 35,651  
; REFERENCE/DOCKET NUMBER: 150.105W01  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 612-339-0331  
; TELEFAX: 612-339-3061  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 970 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
PCT-US95-06790-1

Query Match 88.9%; Score 626.8; DB 5; Length 970;  
Best Local Similarity 99.7%; Pred. No. 2.6e-135;  
Matches 628; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCGGCGCGGTGGTGGCGG 60  
Db 341 CCCAGGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCGGCGCGGTGGTGGCGG 400  
Qy 61 CGATCAAGAGTCTTTCCGACACGACGACGACGACGACGACGACGACGACGACGACGACG 120  
Db 401 CGATCAAGAGTCTTTCCGACACGACGACGACGACGACGACGACGACGACGACGACGACG 460  
Qy 121 TGTGGGGTTGACCCACAGCGCGGCTGTCGGCGGTGGGGCGCGGTCTGTACGCTG 180  
Db 461 TGTGGGGTTGACCCACAGCGCGGCTGTCGGCGGTGGGGCGCGGTCTGTACGCTG 520

Qy 181 AGCGTCCGGGTGGAGGTCCGCGACGCTGCACCCGCTGCATACGCGCGGATGTGCCCGA 240  
Db 521 AGCGTCCGGGTGGAGGAGCGCGACGCTGCACCCGCTGCATACGCGCGGATGTGCCCGA 580  
Qy 241 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGTATCGGTCTCGTGTGCGTGTACGCGCGG 300  
Db 581 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGTATCGGTCTCGTGTGCGTGTACGCGCGG 640  
Qy 301 TCACCCCGTTCGGGTTCATCGAAACGCGCTACCGCAAGGTGCTGACGCGCGTGTAGCG 360  
Db 641 TCACCCCGTTCGGGTTCATCGAAACGCGCTACCGCAAGGTGCTGACGCGCGTGTAGCG 700  
Qy 361 ACGAGATCGTGTACCTGACCCCGCAGCAGGAGGAGCCGACACGTCGTGTGTCACAGGCCAATT 420  
Db 701 ACGAGATCGTGTACCTGACCCCGCAGCAGGAGGAGCCGACACGTCGTGTGTCACAGGCCAATT 760  
Qy 421 CGCGATCGATGCGGACGCTCGTTCGTGAGCGCGCGGTGCTGCTCGCGCGCAAGGCGG 480  
Db 761 CGCGATCGATGCGGACGCTCGTTCGTGAGCGCGCGGTGCTGCTCGCGCGCAAGGCGG 820  
Qy 481 GCGAGGTGAGTACGTGCTCGTCTGAGGTGGACTACATGAGCTCTCGCGCGCGCCAGA 540  
Db 821 GCGAGGTGAGTACGTGCTCGTCTGAGGTGGACTACATGAGCTCTCGCGCGCGCCAGA 880  
Qy 541 TGGTGTGCGGTGGCCACCGCGATGATTCCTTCTGAGCACGACGACGACGACGACGACG 600  
Db 881 TGGTGTGCGGTGGCCACCGCGATGATTCCTTCTGAGCACGACGACGACGACGACGACG 940  
Qy 601 TCATGGGGCAAAACATGACGCCAGCGGCGG 630  
Db 941 TCATGGGGCAAAACATGACGCCAGCGGCGG 970

## RESULT 6

US-08-757-653-135  
; Sequence 135, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear



MOLECULE TYPE: DNA (genomic)  
US-08-757-653-135

Query Match 87.9%; Score 620; DB 2; Length 620;  
Best Local Similarity 100.0%; Pred. No. 8.7e-134;  
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAAGCAGCTGAGC 95  
DB 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAAGCAGCTGAGC 60  
QY 96 CAATTATGACACAGAACACCGCTGTCGGGGTTGACCCACAGGCGCCGACTGTCGGCG 155  
DB 61 CAATTATGACACAGAACACCGCTGTCGGGGTTGACCCACAGGCGCCGACTGTCGGCG 120  
QY 156 CTGGGCGCGCGGTCTGTCACTGAGCGCTGTCGGGGTTCAGCCACAGGCGCCGACTGTCGGCG 215  
DB 121 CTGGGCGCGCGGTCTGTCACTGAGCGCTGTCGGGGTTCAGCCACAGGCGCCGACTGTCGGCG 180  
QY 216 TCCGACTACGCGCGGATGTCGCGATCGAACACCGCTGAGGGGCGCCACATCGGTCTGATC 275  
DB 181 TCGCAGCTACGCGCGGATGTCGCGATCGAACACCGCTGAGGGGCGCCACATCGGTCTGATC 240  
QY 276 GGTCTGCTGTCGCTGACGCGCGGTCAACCGTTTCGGGTTTCATCGAAACGCGGTACCGC 335  
DB 241 GGTCTGCTGTCGCTGACGCGCGGTCAACCGTTTCGGGTTTCATCGAAACGCGGTACCGC 300  
QY 336 AAGGTGCTGACGCGCGGTGTTAGCGACGAGATCGTGTACCTGACCGCGGACGAGGAGC 395  
DB 301 AAGGTGCTGACGCGCGGTGTTAGCGACGAGATCGTGTACCTGACCGCGGACGAGGAGC 360  
QY 396 CGCAGCTGTGTCACAGGCAAGCAATTCGCGATCGATCGGACGCGTCTGTCGAGCGCG 455  
DB 361 CGCAGCTGTGTCACAGGCAAGCAATTCGCGATCGATCGGACGCGTCTGTCGAGCGCG 420  
QY 456 CGGCTGCTGTCGCGCGGAGGCGGAGTGGAGTACGTGCGCTCTGTCGAGGTGAGC 515  
DB 421 CGGCTGCTGTCGCGCGGAGGCGGAGTGGAGTACGTGCGCTCTGTCGAGGTGAGC 480  
QY 516 TACATGAGAGCTTCGCGCGCGGAGATGGTGTGCGTGGCCACCGCGATGATTCCTTTCCTG 575  
DB 481 TACATGAGAGCTTCGCGCGCGGAGATGGTGTGCGTGGCCACCGCGATGATTCCTTTCCTG 540  
QY 576 GAGCAGACGACGCGCAACCGTGCCTCATGCGGGGCAAAACATGACGCGCGGTCGCG 635  
DB 541 GAGCAGACGACGCGCAACCGTGCCTCATGCGGGGCAAAACATGACGCGCGGTCGCG 600  
QY 636 CTGGTCCGTAGCGAGGCCCC 655  
DB 601 CTGGTCCGTAGCGAGGCCCC 620

## RESULT 7

US-08-757-653-138/c  
Sequence 138, Application US/08757653  
Patent No. 5843669  
GENERAL INFORMATION:  
APPLICANT: Kaiser, Michael W.  
APPLICANT: Lyamichev, Victor I.  
APPLICANT: Lyamichev, Natacha  
TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
NUMBER OF INVENTION: Thermostable FEN-1 Endonucleases  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Medlen & Carroll, LLP  
STREET: 220 Montgomery Street, Suite 2200  
CITY: San Francisco  
STATE: California  
COUNTRY: United States Of America  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/757,653  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Ingolia, Diane E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: FORS-02565  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 138:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 620 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-757-653-138

Query Match 87.9%; Score 620; DB 2; Length 620;  
Best Local Similarity 100.0%; Pred. No. 8.7e-134;  
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAAGCAGCTGAGC 95  
DB 620 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAAGCAGCTGAGC 561  
QY 96 CAATTATGACACAGAACACCGCTGTCGGGGTTGACCCACAGGCGCCGACTGTCGGCG 155  
DB 560 CAATTATGACACAGAACACCGCTGTCGGGGTTGACCCACAGGCGCCGACTGTCGGCG 501  
QY 156 CTGGGCGCGCGGTCTGTCACTGAGCGTTCGCGGCTGAGGTCCGCGACGTCGACCCG 215  
DB 500 CTGGGCGCGCGGTCTGTCACTGAGCGTTCGCGGCTGAGGTCCGCGACGTCGACCCG 441  
QY 216 TCGCAGCTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCGCCAACTCGGTCTGATC 275  
DB 440 TCGCAGCTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCGCCAACTCGGTCTGATC 381  
QY 276 GGTCTGCTGTCGCTGACGCGCGGTTCACCGGTTTCGGGTTTCATCGAAACGCGGTACCGC 335  
DB 380 GGTCTGCTGTCGCTGACGCGCGGTTCACCGGTTTCGGGTTTCATCGAAACGCGGTACCGC 321  
QY 336 AAGGTGCTGACGCGCGGTTCAGCGACGAGATCGTGTACCTGACCGCGACGAGGAGC 395  
DB 320 AAGGTGCTGACGCGCGGTTCAGCGACGAGATCGTGTACCTGACCGCGACGAGGAGC 261  
QY 396 CGCCACGTTGTCGACAGGCCAAATTCGCCGATCGATGCGGACGCGTTCGTCGAGCGCG 455  
DB 260 CGCCACGTTGTCGACAGGCCAAATTCGCCGATCGATGCGGACGCGTTCGTCGAGCGCG 201  
QY 456 CGCGTGTGTCGCGCGGACGCGCGGCTGAGGTGAGTACGTGCGCTTCGTCGAGGTGAGC 515  
DB 200 CGCGTGTGTCGCGCGGACGCGCGGCTGAGGTGAGTACGTGCGCTTCGTCGAGGTGAGC 141  
QY 516 TACATGAGAGCTTCGCGCGCGGACGATGGTGTGCGTGGCCACCGCGATGATTCCTTTCCTG 575  
DB 140 TACATGAGAGCTTCGCGCGCGGACGATGGTGTGCGTGGCCACCGCGATGATTCCTTTCCTG 81  
QY 576 GAGCAGACGACGCGCAACCGTGCCTCATGCGGGGCAAAACATGACGCGCGGTCGCG 635  
DB 80 GAGCAGACGACGCGCAACCGTGCCTCATGCGGGGCAAAACATGACGCGCGGTCGCG 21  
QY 636 CTGGTCCGTAGCGAGGCCCC 655  
DB 20 CTGGTCCGTAGCGAGGCCCC 1

## RESULT 8

US-08-520-946-135

```

; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-520-946-135

```

```

Query Match      87.9%; Score 620; DB 3; Length 620;
Best Local Similarity 100.0%; Pred. No. 8.7e-134;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGGCGGTGTCGCCGCGATCAAGGAGTCTTCGGCACCAGCCAGCTGAGC 95
Db 1 ATCAACATCCGGCGGTGTCGCCGCGATCAAGGAGTCTTCGGCACCAGCCAGCTGAGC 60

QY 96 CAATTTCATGGACCAAGAACACCGCTGTCGGGGTTGACCCACAAGCGCCGACTGTCGGCG 155
Db 61 CAATTTCATGGACCAAGAACACCGCTGTCGGGGTTGACCCACAAGCGCCGACTGTCGGCG 120

QY 156 CTGGGGCCCGGGTCTGTACGTAGCGTGCCTGGGGTGGAGGTCCGGACGTCGACCCG 215
Db 121 CTGGGGCCCGGGTCTGTACGTAGCGTGCCTGGGGTGGAGGTCCGGACGTCGACCCG 180

QY 216 TCGCACTACGGCGGATGTCGGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGGCGGATGTCGGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GCGTCGCTGTCGGGTACCGCGGGTCAACCGGTTTCGGGTTTCATCGAAACGCGTACCGC 335
Db 241 GCGTCGCTGTCGGGTACCGCGGGTCAACCGGTTTCGGGTTTCATCGAAACGCGTACCGC 300

QY 336 AAGTGGTTCGACGGCGGTGTACGACGAGATCGTGTACTGACCGCCGACGAGAGGAC 395
Db 301 AAGTGGTTCGACGGCGGTGTACGACGAGATCGTGTACTGACCGCCGACGAGAGGAC 360

QY 396 CGCCACGTGGTCACAGCCCAATTTCGGCGATCGATGGGAGCGTTCGTCGAGCGG 455
Db 361 CGCCACGTGGTCACAGCCCAATTTCGGCGATCGATGGGAGCGTTCGTCGAGCGG 420

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QY 456 CGCGTCTGGTCCGCCCAAGCGCGGCGAGGTGAGTACGTGCCCCCTCGTCTGAGGTGAC 515
Db 421 CGCGTCTGGTCCGCCCAAGCGCGGCGAGGTGAGTACGTGCCCCCTCGTCTGAGGTGAC 480

QY 516 TACATGACGTCTCGCCCCCGCCAGATGTCGGTGGCCACCGGATGATTCCTTCCTG 575
Db 481 TACATGACGTCTCGCCCCCGCCAGATGTCGGTGGCCACCGGATGATTCCTTCCTG 540

QY 576 GAGCACGACGACGACCAACCGTCCCTCATGGGGGCAAAACATGACGCGCAGCGGTGCCG 635
Db 541 GAGCACGACGACGACCAACCGTCCCTCATGGGGGCAAAACATGACGCGCAGCGGTGCCG 600

QY 636 CTGGTCCGTAGCGAGGCCCC 655
Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 9
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-520-946-138

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```

Query Match      87.9%; Score 620; DB 3; Length 620;
Best Local Similarity 100.0%; Pred. No. 8.7e-134;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGGCGGTGTCGCCGCGATCAAGGAGTCTTCGGCACCAGCCAGCTGAGC 95
Db 620 ATCAACATCCGGCGGTGTCGCCGCGATCAAGGAGTCTTCGGCACCAGCCAGCTGAGC 561

QY 96 CAATTTCATGGACCAAGAACACCGCTGTCGGGGTTGACCCACAAGCGCCGACTGTCGGCG 155
Db 560 CAATTTCATGGACCAAGAACACCGCTGTCGGGGTTGACCCACAAGCGCCGACTGTCGGCG 501

QY 156 CTGGGGCCCGGGTCTGTACGTAGCGTGCCTGGGGTGGAGGTCCGCGACGTCGACCCG 215

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Db 500 CTGGGGCCGGCGTCTGTCACTGAGCTGCCGGCTGGAGTCCGGCAGCTGCACCCG 441
Qy 216 TCCACATACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 275
Db 440 TCGACATACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 381
Qy 276 GGTCTCGTCTGCTGTACGCGCGGGTCAACCCCTTCCGGTTTCATCGAAACCGCGTACCCG 335
Db 380 GGTCTCGTCTGCTGTACGCGCGGGTCAACCCCTTCCGGTTTCATCGAAACCGCGTACCCG 321
Qy 336 AAGTGTGTGACGCGCGGTGTACGACGAGATCGTGTACCTGACCCGCGGACGAGGAGGAC 395
Db 320 AAGTGTGTGACGCGCGGTGTACGACGAGATCGTGTACCTGACCCGCGGACGAGGAGGAC 261
Qy 396 CGCCACGTGTGTGACAGCGCAATTCGCCGATCGATGCGGACCGGTTCGTCGAGCCG 455
Db 260 CGCCACGTGTGTGACAGCGCAATTCGCCGATCGATGCGGACCGGTTCGTCGAGCCG 201
Qy 456 CGGTCTGTGTGCGCGCGGAGGCGGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 515
Db 200 CGGTCTGTGTGCGCGCGGAGGCGGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 141
Qy 516 TACATGACGTCTCGCGCCCGCAGATGCTGCTGGTGGCCACCGCGATGATTCCTTCTCG 575
Db 140 TACATGACGTCTCGCGCCCGCAGATGCTGCTGGTGGCCACCGCGATGATTCCTTCTCG 81
Qy 576 GAGCAGCAGCAGCCCAACCGTGCCTCATGGGGGCAACATGACGCGCCAGCGGTGCCG 635
Db 80 GAGCAGCAGCAGCCCAACCGTGCCTCATGGGGGCAACATGACGCGCCAGCGGTGCCG 21
Qy 636 CTGGTCCGTAGCAGGCCCC 655
Db 20 CTGGTCCGTAGCAGGCCCC 1
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## RESULT 10

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US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
```

```
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      87.9%; Score 620; DB 4; Length 620;
Best Local Similarity 100.0%; Pred. No. 8.7e-134;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGCGCGGTGTGCCGATCAAGGAGTCTTCGCGCACCAAGCCAGCTGAGC 95
Db 1 ATCAACATCCGCGCGGTGTGCCGATCAAGGAGTCTTCGCGCACCAAGCCAGCTGAGC 60
Qy 96 CAATTATGAGACAGAAACCCCGTGTCTGGGTTTGACCCACAAGCGCCAGCTGTGGCG 155
Db 61 CAATTATGAGACAGAAACCCCGTGTCTGGGTTTGACCCACAAGCGCCAGCTGTGGCG 120
Qy 156 CTGGGGCCCGCGGTGTGTACGTGAGCGTGTGGGCTGGAGGTCCGCGACGTGACCCG 215
Db 121 CTGGGGCCCGCGGTGTGTACGTGAGCGTGTGGGCTGGAGGTCCGCGACGTGACCCG 180
Qy 216 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 240
Qy 276 GGCTCGCTGTCTGGTGTACGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCCG 335
Db 241 GGCTCGCTGTCTGGTGTACGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCCG 300
Qy 336 AAGGTGTGTACGCGCGGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGGAC 395
Db 301 AAGGTGTGTACGCGCGGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGGAC 360
Qy 396 CGCCACGTGTGTGACAGCGCAATTCGCCGATCGATGCGGACGCTTCGTTCCGTCGAGCCG 455
Db 361 CGCCACGTGTGTGACAGCGCAATTCGCCGATCGATGCGGACGCTTCGTTCCGTCGAGCCG 420
Qy 456 CGCGTCTGTCTCGCGCGGAGGCGGCGAGTACGTGCCCTCGTCTGAGGTGGAC 515
Db 421 CGCGTCTGTCTCGCGCGGAGGCGGCGAGTACGTGCCCTCGTCTGAGGTGGAC 480
Qy 516 TACATGAGCTGTCCGCGCGCGCAGATGCTGCGTGGCCACCGCGATGATTCCTTCTCG 575
Db 481 TACATGAGCTGTCCGCGCGCGCAGATGCTGCGTGGCCACCGCGATGATTCCTTCTCG 540
Qy 576 GAGCAGCAGCAGCCCAACCGTGCCTCATGGGGGCAACATGACGCGCCAGCGGTGCCG 635
Db 541 GAGCAGCAGCAGCCCAACCGTGCCTCATGGGGGCAACATGACGCGCCAGCGGTGCCG 600
Qy 636 CTGGTCCGTAGCAGGCCCC 655
Db 601 CTGGTCCGTAGCAGGCCCC 620
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## RESULT 11

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US-09-655-378A-138/c
; Sequence 138, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
```



QY 396 CGCCAGCTGTGGTGCACAGGCCCAATTTCGCCGATCGATCGGACGGTTCGCTTCGTGAGCCG 455  
Db 361 CGCCAGCTGTGGTGCACAGGCCCAATTTCGCCGATCGATCGGACGGTTCGCTTCGTGAGCCG 420  
QY 456 CGCGTGTGTTCGCCCGCCGAAGCGCGGCGAGGTGGAGTACGTGCGCTTCGTCTGAGGTGGAC 515  
Db 421 CGCGTGTGTTCGCCCGCCGAAGCGCGGCGAGGTGGAGTACGTGCGCTTCGTCTGAGGTGGAC 480  
QY 516 TACATGAGAGCTTCGCCCGCCCGCCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 575  
Db 481 TACATGAGAGCTTCGCCCGCCCGCCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 540  
QY 576 GAGCAGCAGCAGCCCAACCGTGCCTCATCGGGGGCAAAACATGACGCGCCAGCGGTGCCG 635  
Db 541 GAGCAGCAGCAGCCCAACCGTGCCTCATCGGGGGCAAAACATGACGCGCCAGCGGTGCCG 600  
QY 636 CTGGTCCGTAGCAGAGGCCCC 655  
Db 601 CTGGTCCGTAGCAGAGGCCCC 620

## RESULT 13

US-08-757-653-137  
; Sequence 137, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/757,653  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Ingolia, Diane E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: FORS-02565  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 137:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 620 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)

US-08-757-653-137

Query Match 87.7%; Score 618.4; DB 2; Length 620;  
Best Local Similarity 99.8%; Pred. No. 2e-133; 1; Indels 0; Gaps 0;  
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 36 ATCAACATCGGCGCGTGGTGCAGGATCAAGAGTTCTTCGGCACCCAGCCAGCTGAGC 95  
Db 1 ATCAACATCGGCGCGTGGTGCAGGATCAAGAGTTCTTCGGCACCCAGCCAGCTGAGC 60

QY 96 CAATTATGTCGACGAAACCCGCTGTCTGGGGTTGACCCCAAGCGCCGACCTGTGCGCG 155  
Db 61 CAATTATGTCGACGAAACCCGCTGTCTGGGGTTGACCCCAAGCGCCGACCTGTGCGCG 120  
QY 156 CTGGGGCCCCGGGCTGTGTACGTGAGCGTGCCTGGGCTGGAGGTCCGCGACGTGACCCG 215  
Db 121 CTGGGGCCCCGGGCTGTGTACGTGAGCGTGCCTGGGCTGGAGGTCCGCGACGTGACCCG 180  
QY 216 TCGCACTACGCGCGGATGTCGAAACCCCTGAGGGGGCCAAATCGGTCTGATC 275  
Db 181 TCGCACTACGCGCGGATGTCGAAACCCCTGAGGGGGCCAAATCGGTCTGATC 240  
QY 276 GGCTCGCTGTGCTGAGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCCG 335  
Db 241 GGCTCGCTGTGCTGAGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCCG 300  
QY 336 AAGGTGGTTCGACGCGGCTGTAGCGACGAGATCGTGTACTTACCCCGACGAGGAGGAC 395  
Db 301 AAGGTGGTTCGACGCGGCTGTAGCGACGAGATCGTGTACTTACCCCGACGAGGAGGAC 360  
QY 396 CGCCACGTGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGGTTCGTTCGAGCCG 455  
Db 361 CGCCACGTGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGGTTCGTTCGAGCCG 420  
QY 456 CGCGTGTGCTCGCGCGCAAGCGGCGAGGTGGAGTACGTGCTCGTTCGAGGTGGAC 515  
Db 421 CGCGTGTGCTCGCGCGCAAGCGGCGAGGTGGAGTACGTGCTCGTTCGAGGTGGAC 480  
QY 516 TACATGAGAGCTTCGCCCGCCCGCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 575  
Db 481 TACATGAGAGCTTCGCCCGCCCGCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 540  
QY 576 GAGCAGCAGCAGCCCAACCGTGCCTCATGCGGGGGCAAAACATGACGCGCCAGCGGTGCCG 635  
Db 541 GAGCAGCAGCAGCCCAACCGTGCCTCATGCGGGGGCAAAACATGACGCGCCAGCGGTGCCG 600  
QY 636 CTGGTCCGTAGCAGAGGCCCC 655  
Db 601 CTGGTCCGTAGCAGAGGCCCC 620

## RESULT 14

US-08-757-653-139/c  
; Sequence 139, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:

```

; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 139:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-139

Query Match      87.7%; Score 618.4; DB 2; Length 620;
Best Local Similarity 99.8%; Pred. No. 2e-133;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGGATCTTCGCGACCAAGCCAGCTGAGC 95
Db 620 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGGATCTTCGCGACCAAGCCAGCTGAGC 561

QY 96 CAATTTCATGACACAGAAACACCGCTGTCGGGTTGACCCACAAGCGCGACTGTCGGCG 155
Db 560 CAATTTCATGACACAGAAACACCGCTGTCGGGTTGACCCACAAGCGCGACTGTCGGCG 501

QY 156 CTGGGGCCCGCGGCTCTGTACGTGAGCGTGCAGGCTGCGGCTGAGGTCGCGACGTGACCGG 215
Db 500 CTGGGGCCCGCGGCTCTGTACGTGAGCGTGCAGGCTGCGGCTGAGGTCGCGACGTGACCGG 441

QY 216 TCGCATCTAGCGCGGATGTCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 440 TCGCATCTAGCGCGGATGTCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GGCTCGCTGTCGTACGCGCGGTCAAACCGCTTCGGGTTTCATCGAAACCGCGTACCGC 335
Db 380 GGCTCGCTGTCGTACGCGCGGTCAAACCGCTTCGGGTTTCATCGAAACCGCGTACCGC 321

QY 336 AAGTGTGTCGACGCGCTGTTAGCGACGAGATCTGTGTAACCTGACCGCGACGAGAGGAC 395
Db 320 AAGTGTGTCGACGCGCTGTTAGCGACGAGATCTGTGTAACCTGACCGCGACGAGAGGAC 261

QY 396 CGCCACGCGTGGCACAGGCCAATTCGCCGATCGATGCGGAGCGGTCGTTCTGTCGAGCGG 455
Db 260 CGCCACGCGTGGCACAGGCCAATTCGCCGATCGATGCGGAGCGGTCGTTCTGTCGAGCGG 201

QY 456 CGCGTGTGGTCCGCGCGGCGAGGTGAGTACGTGCGCCCTCGTCTGAGGTGGAC 515
Db 200 CGCGTGTGGTCCGCGCGGCGAGGTGAGTACGTGCGCCCTCGTCTGAGGTGGAC 141

QY 516 TACATGGACGTCTCGCCCGCCAGATGTCGTTGGCCACCGCGATGATTCCTTCCTG 575
Db 140 TACATGGACGTCTCGCCCGCCAGATGTCGTTGGCCACCGCGATGATTCCTTCCTG 81

QY 576 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCCCAACATGACGCGCCAGCGGTGCGG 635
Db 80 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCCCAACATGACGCGCCAGCGGTGCGG 21
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RESULT 15

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US-08-757-653-140/c
; Sequence 140, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichiev, Victor I.
; APPLICANT: Lyamichiev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medien & Carroll, LLP
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; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 140:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-140
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Query Match      87.7%; Score 618.4; DB 2; Length 620;
Best Local Similarity 99.8%; Pred. No. 2e-133;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 96 CAATTTCATGACACAGAAACACCGCTGTCGGGTTGACCCACAAGCGCGACTGTCGGCG 155
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QY 156 CTGGGGCCCGCGGCTCTGTACGTGAGCGTGCAGGCTGCGGCTGAGGTCGCGACGTGACCGG 215
Db 500 CTGGGGCCCGCGGCTCTGTACGTGAGCGTGCAGGCTGCGGCTGAGGTCGCGACGTGACCGG 441

QY 216 TCGCATCTAGCGCGGATGTCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 440 TCGCATCTAGCGCGGATGTCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GGCTCGCTGTCGTACGCGCGGTCAAACCGCTTCGGGTTTCATCGAAACCGCGTACCGC 335
Db 380 GGCTCGCTGTCGTACGCGCGGTCAAACCGCTTCGGGTTTCATCGAAACCGCGTACCGC 321

QY 336 AAGTGTGTCGACGCGCTGTTAGCGACGAGATCTGTGTAACCTGACCGCGACGAGAGGAC 395
Db 320 AAGTGTGTCGACGCGCTGTTAGCGACGAGATCTGTGTAACCTGACCGCGACGAGAGGAC 261

QY 396 CGCCACGCGTGGCACAGGCCAATTCGCCGATCGATGCGGAGCGGTCGTTCTGTCGAGCGG 455
Db 260 CGCCACGCGTGGCACAGGCCAATTCGCCGATCGATGCGGAGCGGTCGTTCTGTCGAGCGG 201

QY 456 CGCGTGTGGTCCGCGCGGCGAGGTGAGTACGTGCGCCCTCGTCTGAGGTGGAC 515
Db 200 CGCGTGTGGTCCGCGCGGCGAGGTGAGTACGTGCGCCCTCGTCTGAGGTGGAC 141

QY 516 TACATGGACGTCTCGCCCGCCAGATGTCGTTGGCCACCGCGATGATTCCTTCCTG 575
Db 140 TACATGGACGTCTCGCCCGCCAGATGTCGTTGGCCACCGCGATGATTCCTTCCTG 81

QY 576 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCCCAACATGACGCGCCAGCGGTGCGG 635
Db 80 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCCCAACATGACGCGCCAGCGGTGCGG 21
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Qy 636 CTGGTCGTAGCGAGGCCCC 655  
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Db 20 CTGGTCGTAGCGAGGCCCC 1

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Job time : 115.459 secs



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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 91.866 Seconds  
(without alignments)  
11150.034 Million cell updates/sec

Title: US-09-285-306-2

Perfect score: 626

Sequence: 1 tccgtcccgctggtggcg.....aggctcccgctggtgggtacc 626

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405569

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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1	480.4	76.7	706	US-08-797-812-24	Sequence 24, Appl
2	480.4	76.7	4403765	3 US-09-103-840A-2	Sequence 2, Appl
3	480.4	76.7	4411529	3 US-09-103-840A-1	Sequence 1, Appl
4	470.6	75.2	620	2 US-08-757-653-135	Sequence 135, App
5	470.6	75.2	620	2 US-08-757-653-138	Sequence 138, App
6	470.6	75.2	620	3 US-08-520-946-135	Sequence 135, App
7	470.6	75.2	620	3 US-08-520-946-138	Sequence 138, App
8	470.6	75.2	620	4 US-09-655-378A-135	Sequence 135, App
9	470.6	75.2	620	4 US-09-655-378A-138	Sequence 138, App
10	469	74.9	620	2 US-08-757-653-136	Sequence 136, App
11	469	74.9	620	2 US-08-757-653-137	Sequence 137, App
12	469	74.9	620	2 US-08-757-653-139	Sequence 139, App
13	469	74.9	620	2 US-08-757-653-140	Sequence 140, App
14	469	74.9	620	3 US-08-520-946-136	Sequence 136, App
15	469	74.9	620	3 US-08-520-946-137	Sequence 137, App
16	469	74.9	620	3 US-08-520-946-139	Sequence 139, App
17	469	74.9	620	3 US-08-520-946-140	Sequence 140, App
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22	456.4	72.9	3447	2 US-08-313-185-57	Sequence 57, Appl
23	456.4	72.9	3447	3 US-09-082-614A-57	Sequence 57, Appl
24	447.2	71.4	970	1 US-08-250-030-1	Sequence 1, Appl
25	447.2	71.4	970	5 PCT-US95-06790-1	Sequence 1, Appl
26	373.2	59.6	5099	4 US-09-887-052-1	Sequence 1, Appl
27	371.6	59.4	5099	4 US-09-887-052-3	Sequence 3, Appl

28	371.6	59.4	5099	4	US-09-887-052-5	Sequence 5, Appl
29	363	58.0	706	3	US-08-797-812-25	Sequence 25, Appl
30	349.6	55.8	4227	4	US-09-902-540-8919	Sequence 8919, App
31	349.6	55.8	9367	4	US-09-902-540-951	Sequence 951, App
32	325	51.9	4074	4	US-09-252-991A-4737	Sequence 4737, App
33	325	51.9	4092	4	US-09-252-991A-4771	Sequence 4771, App
34	322.4	51.5	4083	4	US-09-489-039A-22	Sequence 22, Appl
35	322.4	51.5	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	262.2	41.9	4167	4	US-09-543-681A-3177	Sequence 3177, App
37	252.8	40.4	11935	4	US-09-634-238-401	Sequence 401, App
38	247.2	39.5	2964	4	US-09-540-236-1097	Sequence 1097, App
39	247.2	39.5	31063	4	US-09-596-002-20	Sequence 20, Appl
40	245.6	39.2	4143	4	US-09-328-352-4006	Sequence 4006, App
41	239.4	38.2	3612	4	US-09-583-110-973	Sequence 973, App
42	239.4	38.2	3651	4	US-09-107-433-1652	Sequence 1652, App
43	238.2	38.1	1830121	4	US-09-557-884-1	Sequence 1, Appl
44	238.2	38.1	1830121	4	US-09-643-990A-1	Sequence 1, Appl
45	237.8	38.0	14672	3	US-08-961-527-111	Sequence 111, App

## ALIGNMENTS

RESULT 1

US-08-797-812-24

; Sequence 24, Application US/08797812

; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berno, Anthony J.

; APPLICANT: Stryer, Lubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, 8th Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422

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; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 706 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
US-08-797-812-24

Query Match      76.7%; Score 480.4; DB 3; Length 706;
Best Local Similarity 85.5%; Pred. No. 5.2e-99;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTCTTCGGAACCAAGCCAGCTGTCGAGATTCA 60
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 44 TCCGCGCGTGGTCCGCGGATCAAGGAGTCTTCGGAACCAAGCCAGCTGAGCCAAATTCA 103
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Qy 61 TGGACCAAGAACCAACCGCTGTCGGGCTTGACCCACAAGCGTCTGTCGGCGCTGGGCC 120
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 104 TGGACCAAGAACCAACCGCTGTCGGGCTTGACCCACAAGCGCGACTGTCGGCGCTGGGCC 163
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 121 CCGGTGCTGACCGCTGACCGCGCGCGCTGAGGTCGCGAGTCCGAGTCAACCCCTCGCACT 180
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 164 CCGGCGGTCTGTACGTGAGGTGTCGGGCTGAGGTCGCGAGTCAACCCCTCGCACT 223
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGCCCGAACATCGGCCTGATCGGCTCGC 240
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 224 ACGGCGCATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC 283
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 241 TGTGCGTGTACGCGCGGTCAACCCGTTGCGTTCATCGAGACGCTTACCGGAAGGTCT 300
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Qy 284 TGTGCGTGTACGCGCGGTCAACCCGTTGCGTTCATCGAAACGCGTACCGCAAGGTGG 343
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Qy 301 CGGACGAGTGTACCGACGACATCCACTACCTGACGCGCGAGCAAGAGGACCGCCACG 360
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 344 TCGACGCGGTGTAGCGACGAGATCGTGTACTGACCGCGCAGAGGAGGACCGCCACG 403
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 421 TGGTTCGCGCGAAGGGCGGAGGTGGAGTTCGTGTCGGGACCGAGGTGCACTACATGG 480
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 464 TGGTTCGCGCGAAGGGCGGAGGTGGAGTTCGTGTCGGGACCGAGGTGCACTACATGG 523
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 481 ATGTCCTCCGCGCGCAGATGTGTCGTCGCGACCGCGCATGATCCGTTCTCTCGAGCACG 540
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Qy 524 ACGTCTCCGCGCGCAGATGTGTCGTCGCGACCGCGCATGATCCCTTCTCTGAGGACG 583
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 541 ACGACGCCCAACCGTCCCTCATGGTGCCAAACATGACGCGCAGGCGGCGGTGCGCTGGTCC 600
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Qy 584 ACGACGCCCAACCGTCCCTCATGGTGCCAAACATGACGCGCAGGCGGCGGTGCGCTGGTCC 643
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Qy 601 GTAGCGAGGTCCTCGTTCGTTACC 626
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Qy 644 GTAGCGAGGTCCTCGTTCGTTACC 669
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RESULT 2
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; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; FILE REFERENCE: 24366-20007.00
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2

; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 706 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
US-08-797-812-24

Query Match      76.7%; Score 480.4; DB 3; Length 706;
Best Local Similarity 85.5%; Pred. No. 1.7e-98;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTCTTCGGAACCAAGCCAGCTGTCGAGATTCA 60
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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Qy 301 CGGACGAGTGTACCGACGACATCCACTACCTGACGCGCGAGCAAGAGGACCGCCACG 360
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Qy 344 TCGACGCGGTGTAGCGACGAGATCGTGTACTGACCGCGCAGAGGAGGACCGCCACG 403
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Qy 421 TGGTTCGCGCGAAGGGCGGAGGTGGAGTTCGTGTCGGGACCGAGGTGCACTACATGG 480
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Qy 464 TGGTTCGCGCGAAGGGCGGAGGTGGAGTTCGTGTCGGGACCGAGGTGCACTACATGG 523
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 481 ATGTCCTCCGCGCGCAGATGTGTCGTCGCGACCGCGCATGATCCGTTCTCTCGAGCACG 540
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 524 ACGTCTCCGCGCGCAGATGTGTCGTCGCGACCGCGCATGATCCCTTCTCTGAGGACG 583
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 541 ACGACGCCCAACCGTCCCTCATGGTGCCAAACATGACGCGCAGGCGGCGGTGCGCTGGTCC 600
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 584 ACGACGCCCAACCGTCCCTCATGGTGCCAAACATGACGCGCAGGCGGCGGTGCGCTGGTCC 643
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 601 GTAGCGAGGTCCTCGTTCGTTACC 626
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 644 GTAGCGAGGTCCTCGTTCGTTACC 669
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESULT 3
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; FILE REFERENCE: 24366-20007.00
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
```

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; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      76.7%; Score 480.4; DB 3; Length 4411529;
Best Local Similarity 85.5%; Pred. No. 1.7e-98;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTTCGGGGCGATCAAGAGTTCTTGGAAACCAAGCAGCTGTCGCAATTCA 60
DB 761045 TCCGTCCTCGTTCGGGGCGATCAAGAGTTCTTGGAAACCAAGCAGCTGTCGCAATTCA 761104

QY 61 TCGACCAAGAACCAACCGCTGTCGGGCTGACCAACCAAGCGTCTGTCTGGGGCTGGGCC 120
DB 761105 TCGACCAAGAACCAACCGCTGTCGGGTTGACCAACCAAGCGCGACTGTGGGGCTGGGCC 761164

QY 121 CCGGTGGTGTGACCCGTGACCGCGCGCTCGAGGTCGCGACGTGCACCCCTCGCACT 180
DB 761165 CCGGGGCTGTGTCACGTGAGCGTCCGGGCTGAGGTCGCGACGTGCACCCCTCGCACT 761224

QY 181 ACGGCGCGATGTCCCGATCGAGACCCCGGAAGGCCCGAATCATCGGCGTGTGTCGCTCGC 240
DB 761225 ACGGCGCGATGTGCCCGATCGAAGCCCTGAGGGGCCCAACATCGTGTGTCGCTCGC 761284

QY 241 TGTTCGTGTACCGCGGGTCAACCGTTCGGTTCATCGAGACGCTTACCGGAAGGTCT 300
DB 761285 TGTTCGTGTACCGCGGGTCAACCGTTCGGGTTTCATCGAAGCGCGTACCGGAAGGTGG 761344

QY 301 CGGACGAGTGTTCACCGACGATCCACTACTGACCGGCCGACGAAGAGGACCGCCACG 360
DB 761345 TCGACGCGGTGTAGCGAGGAGATCGTGTACTGACCGCGCGACGAGGAGACCGCCACG 761404

QY 361 TGGTGGCGAGCGCAACTCGCCCGTGGAGCGCCACCGCGCGCTTACCGAGGAGAGATCC 420
DB 761405 TGGTGGCGACAGCGCAATTGCGCGATCGATCGGAGCGTGTCTCGAGCGCGCGTGC 761464

QY 421 TGGTTCGCGCAAGCGCGCGAGGTGGAGTTCGTGTCGCGACCGAGGTGCACTACATGG 480
DB 761465 TGGTTCGCGCAAGCGCGCGAGGTGGAGTTCGTGTCGCGACCGAGGTGCACTACATGG 761524

QY 481 ATGTCTCGCGCGCGAGATGTGTGCGTTCGCGACCGCCATGATCCGCTTCTTCGAGCAG 540
DB 761525 ACGTCTCGCGCGCGAGATGTGTGCGTTCGCGACCGCCATGATCCGCTTCTTCGAGCAG 761584

QY 541 ACGACGCAACCGTCCCTCATGGGTGCCAAATGACGCGCCAGCGGTTCGCTGGTGC 600
DB 761585 ACGACGCAACCGTCCCTCATGGGGGCAAAATGACGCGCCAGCGGTTCGCTGGTGC 761644

QY 601 GTAGCGAGGCTCCGTGCTGCTACC 626
DB 761645 GTAGCGAGGCTCCGTGCTGCTACC 761670

RESULT 4
US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
```

```
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match      75.2%; Score 470.6; DB 2; Length 620;
Best Local Similarity 85.5%; Pred. No. 8.2e-97;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTTCGGCGCGATCAAGAGTTCTTGGAAACCAAGCAGCTGTCGCAATTCA 60
DB 8 TCCGCGCGTGTGTCGCGCGATCAAGAGTTCTTGGCAACCAAGCAGCTGAGCCAATTCA 67

QY 61 TGGACCAAGAACCAACCGCTGTCGGGCTGACCAACCAAGCGTCTGTTCGGGGCTGGGCC 120
DB 68 TGGACCAAGAACCAACCGCTGTCGGGGTTGACCCCAAGCGCGCTGTTCGGGGCTGGGCC 127

QY 121 CCGGTGGTGTACACCGCTGACCGCGCGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180
DB 128 CCGGGGTCTGTACGTGAGCGTCCGGGCTGAGGTCGCGACGTCGACCGCTCGCACT 187

QY 181 ACGGCGCGATGTGCCCGATCGAGACCCCGGAAGGCCGAAATCATCGGCTGTATCGGCTCGC 240
DB 188 ACGGCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC 247

QY 241 TGTTCGTGTACCGCGGGTCAACCGTTCGGTTCATCGAGACGCTTACCGGAAGGTCT 300
DB 248 TGTTCGTGTACCGCGGGTCAACCGTTCGGGTTTCATCGAAACCGCTTACCGGAAGGTGG 307

QY 301 CGGACGAGTGTTCACCGACGATCCACTACTGACGCGCGAGCAAGAGGACCGCCACG 360
DB 308 TCGACGCGGTGTGAGCGAGGATCGTGTACCTGACCGCGCGAGGAGGACCGCCACG 367

QY 361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCGAACCGCGCTTACACGAGGAGAGATCC 420
DB 368 TGGTGGCACAGGCCAATTCGCCGATCGATGCGGACGGTCTGCTTCGAGCGCGCGTGC 427

QY 421 TGGTTCGCGCGCAAGCGCGCGAGTGTGTCGGTTCGCGACCGCCATGATCCCGTTCCTCGAGCAG 480
DB 428 TGGTTCGCGCGCAAGCGCGCGAGTGTGAGTACGTCGCTCTGAGGTGAGTACATGG 487

QY 481 ATGTCTCGCGCGCGAGTGTGTCGGTTCGCGACCGCCATGATCCCGTTCCTCGAGCAG 540
DB 488 ACGTCTCGCCCGCGAGATGTGTGCGTGGCCACCGCGATGATTCCTTCCTGGAGCAG 547

QY 541 ACGACGCAACCGTCCCTCATGGGTGCCAAATGACGCGCGAGCGGTTCGCTGGTGC 600
DB 548 ACGACGCAACCGTCCCTCATGGGGGCAACATGACGCGCGAGCGGTTCGCTGGTGC 607
```

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QY 601 GTAGCAGGCTCC 613
Db 608 GTAGCAGGCCCC 620

RESULT 5
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match 75.2%; Score 470.6; DB 2; Length 620;
Best Local Similarity 85.5%; Pred. No. 8.2e-97;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAAACCAGCAGCTGTCGAGTTCA 60
Db 613 TCCGCGCGGTGGTGGCGCGATCAAGGAGTTCTTCGGCAACAGCAGCTGAGCCAAATTCA 554
QY 61 TGGACCAAGAAACCCCGCTGTGGGCGCTGACCCCAAGCGTCTGTCTGCGCGCTGGGCC 120
Db 553 TGGACCAAGAAACCCCGCTGTGGGCGCTGACCCCAAGCGCGCTGTCTGCGCGCTGGGCC 494
QY 121 CCGGTGGTCTGACCCGTGACCGCGCGCGCTTCGAGGTCCGCGACGTGACCCCTCGCACT 180
Db 493 CCGGCGGTCTGTACGTGAGCGTGGCGGCTGGAGGTCGCGACGTGACCCCGTCGCACT 434
QY 181 ACGGCCGATGTGCGCGATCAGACCCCGGAGGCCCGAATCGGCTGATCGGCTCGC 240
Db 433 ACGGCCGATGTGCGCGATCAGACCCCGGAGGCCCGAATCGGCTGATCGGCTCGC 374
QY 241 TGTGGGTGACCGCGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 373 TGTGGGTGACCGCGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGGTCT 314
QY 301 CGGACGGAGTTGTCAACCGACACATCCACTACCTGACGGCGCGAAGAGACCGCCACG 360

Db 313 TCGACGGCGTGGTTAGCGACGAGATCGTGTACCTGACCGCGCGAGGAGACCGCCACG 254
QY 361 TGGTGGCGCAGCCCAACTCGCCCGTGCAGCCCAACGCGCTTCCACCGAGGAGATCC 420
Db 253 TGGTGGCACAGGCCAAATTCGCCGATCGATCGGACGGTTCGCTTCGTGAGCGCGCTGTC 194
QY 421 TGGTTCGCCCAAGGGCGCGAGGTGAGTTTCGTGTCCGCGACCGAGGTCCGACTACATGG 480
Db 193 TGGTTCGCCCAAGGGCGCGAGGTGAGTTTCGTGTCCGCGACCGAGGTCCGACTACATGG 134
QY 481 ATGTCTCGCCGCGCAGATGTTGTCGGTCGCGACCGCAATGATCCCGTTCCTCGAGCACG 540
Db 133 ACGTCTCGCCGCGCAGATGTTGTCGGTCGCGACCGCAATGATCCCGTTCCTCGAGCACG 74
QY 541 ACGACGCCAACCGTGCCTCATGGTCCCAACATGACGCGCCAGGCGTCCGCTGGTGC 600
Db 73 ACGACGCCAACCGTGCCTCATGGGCGCAACATGACGCGCCAGGCGTCCGCTGGTGC 14
QY 601 GTAGCAGGCTCC 613
Db 13 GTAGCAGGCCCC 1

RESULT 6
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match 75.2%; Score 470.6; DB 3; Length 620;
Best Local Similarity 85.5%; Pred. No. 8.2e-97;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAAACCAGCAGCTGTCGAGTTCA 60
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Db 8 TCCGCCGCTGCTCGCCGATCAAGAGTTCTTCGGCACCAGCCAGCTGAGCCATTCA 67  
Qy 61 TGGACAGAAACACCCGCTGTGGGCTTCAAGCACAAGCGTCTGTTCGGGCTGGGCC 120  
Db 68 TGGACAGAAACACCCGCTGTGGGCTTCAAGCACAAGCGGCTGTTCGGGCTGGGCC 127  
Qy 121 CCGGTGCTGACCCGCTGACCGCGGCTGAGGTCCGCGGCTGAGGTGCGACCGCTCGCACT 180  
Db 128 CCGGCGCTCTGACGTGAGCTGCGCGGCTGAGGTCCGCGGCTGAGGTGCGACCGCTCGCACT 187  
Qy 181 ACGGCGCATGTGCCGATCGAGACCCCGAAGCCCGCAACATCGGCTTATCGGCTCGC 240  
Db 188 ACGGCGCATGTGCCGATCGAAGACCCCTGAGGGCCCAACATCGTCTGATCGGCTCGC 247  
Qy 241 TGTGCTGTACGCGCGGCTCAACCGCTTTCGGTTTCATGAGACCGCTTACCGGAAGTCT 300  
Db 248 TGTGCTGTACGCGCGGCTCAACCGCTTTCGGTTTCATGAAACCGCTTACCGGAAGTGG 307  
Qy 301 CCGACGGAGTGTACCGGACGATCCACTACTGACGCGCGGCGAAGAGGACCGCCAGC 360  
Db 308 TCGACGGCTGTGTAGCGAGAGATCGTGTACTGACGCGCGGCGAAGAGGACCGCCAGC 367  
Qy 361 TGGTGGCGAGGCAACTCGCCGCTGGAGCGCAACCGGCGCTTCAACCGAGGAGAGATCC 420  
Db 368 TGGTGGCACAGGCAATTCGCGATCGATCGGACGCTCGCTTCGTGAGCGCGCGGTGC 427  
Qy 421 TGGTTCGCGCAAGGCGCGAGGTGAGTTCTGTTCGCGCAGCGAGTFCGACTACATGG 480  
Db 428 TGGTTCGCGCAAGGCGCGAGGTGAGTTCTGTTCGCGCAGCGAGTFCGACTACATGG 487  
Qy 481 ATGTCTCGCGCGCAGATGTTCTGTTGCGGACCGCCATGATCCGTTCTCGAGCAGC 540  
Db 488 ACCTCTCGCGCGCAGATGTTCTGTTGCGGACCGCCATGATCCGTTCTCGAGCAGC 547  
Qy 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAATGACGCGCGGCGGAGGAGGAGTCC 600  
Db 548 ACGAGCCCAACCGTCCCTCATGGGTGCCAATGACGCGCGGCGGAGGAGGAGTCC 607  
Qy 601 GTAGCGAGGCTCC 613  
Db 608 GTAGCGAGGCTCC 620

## RESULT 7

US-08-520-946-138/c  
; Sequence 138, Application US/08520946  
; Patent No. 6372424  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; APPLICANT: LYAMICHEV, VICTOR I.  
; APPLICANT: OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; TITLE OF INVENTION: PATHOGENS  
; NUMBER OF SEQUENCES: 160  
; CORRESPONDENCE ADDRESS: 160  
; ADDRESS: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/520,946  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-520-946-138

Query Match 75.2%; Score 470.6; DB 3; Length 620;  
Best Local Similarity 85.5%; Pred. No. 8.2e-97;  
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 1 TCCGCCGCTGCTCGCCGATCAAGAGTTCTTCGGACCAAGCGTCTGTTCGGGCTGGGCC 60  
Db 613 TCCGCCGCTGCTCGCCGATCAAGAGTTCTTCGGACCAAGCGTCTGTTCGGGCTGGGCC 554  
Qy 61 TGGACAGAAACACCCGCTGTGGGCTTCAAGCACAAGCGTCTGTTCGGGCTGGGCC 120  
Db 553 TGGACAGAAACACCCGCTGTGGGCTTCAAGCACAAGCGGCTGTTCGGGCTGGGCC 494  
Qy 121 CCGGTGCTGACCCGCTGACCGCGGCTGAGGTCCGCGACCTGCAACCCCTCGCACT 180  
Db 493 CCGGCGTCTGTACGTGAGCTGCGGCTGAGGTCCGCGACCTGCAACCCCTCGCACT 434  
Qy 181 ACGGCGCATGTGCCGATCGAGACCCCGAAGCCCGCAACATCGGCTTATCGGCTCGC 240  
Db 433 ACGGCGCATGTGCCGATCGAAGACCCCTGAGGGGCCCAACATCGGCTTATCGGCTCGC 374  
Qy 241 TGTGCTGTACGCGCGGCTCAACCGTTCGGTTTCATCGAGACGCTTACCGGAAGTCT 300  
Db 373 TGTGCTGTACGCGCGGCTCAACCGTTCGGTTTCATCGAAGCGGCTTACCGGAAGTGG 314  
Qy 301 CCGACGAGTGTTCACCGACGACATTCATCTACTGACGCGCGGCGAAGAGGACCGCCAGC 360  
Db 313 TCGACGCGTGTGTAGCGACGAGATCGTGTACTTCACTGACCGCGGACCGAGGAGGACCGCCAGC 254  
Qy 361 TGGTGGCGCAGGCGCAACTCGCCGCTGAGCGGCGGCGGCTTCAACCGAGGAGAGATCC 420  
Db 253 TGGTGGCACAGCGCAATTCGCCGATCGATCGGAGCGGCTTCTGTCAGCGCGCGGTGC 194  
Qy 421 TGGTTCGCGCGCAAGGCGCGGCTGAGGTTCGTTCGGCGACCGAGGTTCGACTACATGG 480  
Db 193 TGGTTCGCGCGCAAGGCGCGGCTGAGGTTCGTTCGGCGAGTTCGTTCGAGGTGAGTACATGG 134  
Qy 481 ATGTCTCGCGCGCAGATGTTCTGTTGCGGACCGCCATGATCCGTTCTTCGAGCAGC 540  
Db 133 ACGTCTCGCGCGCAGATGTTCTGTTGCGGACCGCGATGATTCCTTCTTCGAGCAGC 74  
Qy 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAATGACGCGCGGCGGAGGAGGAGTCC 600  
Db 73 ACGAGCCCAACCGTCCCTCATGGGTGCCAATGACGCGCGGCGGAGGAGGAGTCC 14  
Qy 601 GTAGCGAGGCTCC 613  
Db 13 GTAGCGAGGCTCC 1

## RESULT 8

US-09-655-378A-135  
; Sequence 135, Application US/09655378A  
; Patent No. 6673616  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; APPLICANT: LYAMICHEV, VICTOR I.  
; APPLICANT: OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; NUMBER OF SEQUENCES: 165

Qy	541	ACGAGCCCAACCGTGCCTCATGGTGCACCAATGACGAGCCAGCGGTTCCGCTGGTCC	600
Db	548	ACGAGCCCAACCGTGCCTCATGGTGCACCAATGACGAGCCAGCGGTTCCGCTGGTCC	607
Qy	601	GTAGCGAGGCTCC 613	
Db	608	GTAGCGAGGCCCC 620	
RESULT 9			
US-09-655-378A-138/c			
; Sequence 138, Application US/09655378A			
; Patent No. 6673616			
; GENERAL INFORMATION:			
; APPLICANT: BROW, MARY ANN D.			
; LYAMICHEV, VICTOR I.			
; OLIVE, DAVID M.			
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF			
; PATHOGENS			
; NUMBER OF SEQUENCES: 165			
; CORRESPONDENCE ADDRESS:			
; ADDRESSEE: MEDLEN & CARROLL			
; STREET: 220 MONTGOMERY STREET, SUITE 2200			
; CITY: SAN FRANCISCO			
; STATE: CALIFORNIA			
; COUNTRY: UNITED STATES OF AMERICA			
; ZIP: 94104			
; COMPUTER READABLE FORM:			
; MEDIUM TYPE: Floppy disk			
; OPERATING SYSTEM: PC-DOS/MS-DOS			
; SOFTWARE: Patentin Release #1.0, Version #1.30			
; CURRENT APPLICATION DATA:			
; APPLICATION NUMBER: US/09/655,378A			
; FILING DATE: 05-Sep-2000			
; CLASSIFICATION: <Unknown>			
; ATTORNEY/AGENT INFORMATION:			
; NAME: CARROLL, PETER G.			
; REGISTRATION NUMBER: 32,837			
; REFERENCE/DOCKET NUMBER: FORS-01756			
; TELECOMMUNICATION INFORMATION:			
; TELEPHONE: (415) 705-8410			
; TELEFAX: (415) 397-8338			
; INFORMATION FOR SEQ ID NO: 138:			
; SEQUENCE CHARACTERISTICS:			
; TYPE: nucleic acid			
; STRANDEDNESS: double			
; TOPOLOGY: linear			
; MOLECULE TYPE: DNA (genomic)			
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:			
US-09-655-378A-135			
Query Match 75.2%; Score 470.6; DB 4; Length 620;			
Best Local Similarity 85.5%; Pred. No. 8.2e-97;			
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;			
Qy	1	TCCGTCCTCGTGGCGGCGATCAAGGAGTTCTTCGGAAACGACGAGCTGCGAGTTCA	60
Db	8	TCCGCGCGGTGGTTCGCGCGGATCAAGGAGTTCTTCGGACACGACGAGCTGAGCCAAATTC	67
Qy	61	TGACACAGAACCAACCGCTGTCGGGCTTGACCCACAAAGCGTCTGTCGGCGCTGGGCC	120
Db	68	TGACACAGAACCAACCGCTGTCGGGTTGACCCACAAAGCGGCTGTCGGCGCTGGGGC	127
Qy	121	CCGGTGGTCTGACCCCGTGAACCGCGGCTCGAGGTCCGCGACGTGACACCCCTCGCACT	180
Db	128	CCGGCGGTCTGTCACTGAGCGTTCGGGCTGAGGTCCGCGACGTGACACCGCTCGCACT	187
Qy	181	ACGGCCGATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC	240
Db	188	ACGGCCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC	247
Qy	241	TGTCGGTGTACGCGGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT	300
Db	248	TGTCGGTGTACGCGGGGTCAACCCGTTCCGTTTCATCGAAACCGCTTACCGGAAGGTGG	307
Qy	301	CGGACGAGTTGTCAACCGACGATCCTACATCTGACGCGCCGACGAAGAGGACCGCCACG	360
Db	308	TCGACGCGGTGGTTAGCGACGAGATCGTGTACTTGACCGCGACGAGGAGACCGCCACG	367
Qy	361	TGTTGGCGGACGCGCAACTCGCGGTGGAGCCAAACGCGCGCTTACCGAGAGAGATCC	420
Db	368	TGTTGGCGACAGCGCAATTCGCCGATCGATTCGCGGACGCGTTCGTTTCGTCGAGCGCGCGTGC	427
Qy	421	TGTTTCGCGCAGGCGCGCGAGGTGGAGTTTCGTTGTCGCGACCGAGGTGCACTACATGG	480
Db	428	TGTTTCGCGCAGGCGCGCGAGGTGGAGTACGTGCCCTCGTCTGAGAGTGACTACATGG	487
Qy	481	ATGTTCTCGCGCGCCAGATGGTGTGGTTCGCGACCGCCATGATCCCGTTCTTCGAGCAACG	540
Db	488	ACGTCTCGCGCGCCAGATGGTGTGGTGGCCACCGCATGATTCCTTCTCGGAGCAACG	547



[illegible]

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1  RESULT 10
2  US-08-757-653-136
3  ; Sequence 136, Application US/08757653
4  ; Patent No. 5843669
5  ; GENERAL INFORMATION:
6  ; APPLICANT: Kaiser, Michael W.
7  ; APPLICANT: Lyamichev, Victor I.
8  ; APPLICANT: Lyamichev, Natasha
9  ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
10 ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
11 ; NUMBER OF SEQUENCES: 130
12 ; CORRESPONDENCE ADDRESS:
13 ; ADDRESSEE: Medlen & Carroll, LLP
14 ; STREET: 220 Montgomery Street, Suite 2200
15 ; CITY: San Francisco
16 ; STATE: California
17 ; COUNTRY: United States Of America
18 ; ZIP: 94104
19 ; COMPUTER READABLE FORM:
20 ; MEDIUM TYPE: Floppy disk
21 ; COMPUTER: IBM PC compatible
22 ; OPERATING SYSTEM: PC-DOS/MS-DOS
23 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
24 ; CURRENT APPLICATION NUMBER: US/08/757,653
25 ; FILING DATE:
26 ; CLASSIFICATION: 435
27 ; ATTORNEY/AGENT INFORMATION:
28 ; NAME: Ingolia, Diane E.
29 ; REGISTRATION NUMBER: 40,027
30 ; REFERENCE/DOCKET NUMBER: FORS-02565
31 ; TELECOMMUNICATION INFORMATION:
32 ; TELEPHONE: (415) 705-8410
33 ; TELEFAX: (415) 397-8338
34 ; INFORMATION FOR SEQ ID NO: 136:
35 ; SEQUENCE CHARACTERISTICS:
36 ; LENGTH: 620 base pairs
37 ; TYPE: nucleic acid
38 ; STRANDEDNESS: double
39 ; TOPOLOGY: linear
40 ; MOLECULE TYPE: DNA (genomic)
41 US-08-757-653-136

```

Query Match 74.9%; Score 469; DB 2; Length 620;

Best Local Similarity		85.3%	Pred. No. 1.9e-96;						
Matches		523;	Conservative	0;	Mismatches	90;	Indels	0;	Gaps
QY	1	TCGGTCCCGTCTGTGGCGCGCATCAAGAGATTCTTCGGAAACAGGACAGCTGTGCGAGTTCA	60						
Db	8	TCGGCGCGTGTGTCCGCGCATCAAGAGATTCTTCGGACACAGCCAGCTGAGCGAATTCA	67						
QY	61	TGGACAGAAACAACCCGCTCTCGGGCGTGAACCAACAAGCGTCTGTGTGGCGCTGGGCC	120						
Db	68	TGGACAGAAACAACCCGCTCTCGGGGTGACCTACAAGCGCCGACTGTCTGGCGCTGGGGC	127						
QY	121	CCGCTGTCTGACCCGTTGACCGCGCGCTCTGAGGTCGCGAGGTGCACCCCTCGCACT	180						
Db	128	CCGCGGTCTGTCACTGTAGCGTGTCCGGGTGGAGGTCGCGAGCTGCGACCTGTGCGACT	187						
QY	181	ACGGCCGCATGTGCCGATCGAGACCCGGAAGCCCGAAACATCGGCGCTCATCGGCTCGC	240						
Db	188	ACGGCCGGATGTGCCCGATCGAAACCCCTGAGGGGCCAACATCGGTCTGATCGGCTCGC	247						
QY	241	TGTCGGTGTACGCGCGGTTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGTCT	300						
Db	248	TGTCGGTGTACGCGCGGTTCAACCCGTTCCGTTTCATCGAAACCGCTACCGCAAGGTG	307						
QY	301	CGNACGAGTTGTACCGACGACATCCACTACTGACGGCGGAGAGAGACCGCCACG	360						
Db	308	TCGACGCGTGTGTAGCGACGAGATCGTGTACTGACCGCCGACGAGGAGACCGCCACG	367						
QY	361	TGTTGGCGCAGGCCAACTCCGCCGTGGACGCCAAACGCGCGCTTCCACCGAGAGAAGATCC	420						
Db	368	TGTTGGCAGCAGGCCAATTCCGCCATCGATCGGACGGTCTGTTCTGTCGACCGCGGTGC	427						
QY	421	TGTTTCCGCCAAGGGCGGCGAGGTGAGTTCTGTGTGGCGACGAGGTTCGATTACATGG	480						
Db	428	TGTTTCCGCCAAGGGCGGCGAGGTGAGTTACGTGTGCCCTCGTCTGAGTGGACTACATGG	487						
QY	481	ATGTTCTCGCGCCAGATGGTTCGGTTCGCGACCGCCATGATCCCGTTCTCTCGACGACG	540						
Db	488	ACGTCTCGCCCCCGCAGATGGTCTGGTGTGCCACCCGCGATGATTCCTTCTCTGGAGCAG	547						
QY	541	ACGACGCCAACCGTGCCTCATGGGTGCCAAACATGACGCGCCAGGGGGTTTCCGCTGGTGC	600						
Db	548	ACGACGCCAACCGTGCCTCATGGGGGCCAAACATGACGCGCCAGGGGGTTCGCTGGTGC	607						
QY	601	GTACGAGGTC	613						
Db	608	GTACGAGGTC	620						

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RESULT 11
US-08-757-653-137
; Sequence 137, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653

```

```
;
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-137

Query Match      74.9%; Score 469; DB 2; Length 620;
Best Local Similarity 85.3%; Pred. No. 1.9e-96;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACACGCGAGCTGCGAGTTCA 60
DB 8 TCCGCGCGTGGTGGCGCGATCAAGGAGTTCTTCGGAACACGCGAGCTGAGCCAATTCA 67

QY 61 TGGACCAAGAACACCGCTGTCGGGCGCTGACCCACAAGCGTCTGTGCGGCGTGGGCC 120
DB 68 TGGACCAAGAACACCGCTGTCGGGCGTTGACCCACAAGCGCGAGTGTGGCGTGGGCC 127

QY 121 CCGGTGCTGTGACCGCGTACCGCGCGCGCTGAGGTCCGGACGTCGACCCCTCGCACT 180
DB 128 CCGGCGGTCTGTACGTGAGCGTGGCGGCTGGAGTCCGCGAGTCCACCGTGCACCT 187

QY 181 ACGGCGCGATGTGCCCGATCGAGACCCCGGGAAGCGCCGAATCGTGGCTGTGATCGGCTCGC 240
DB 188 ACGGCGCGATGTGCCCGATCGAAACCCCTGAGGGGCGCCAAATCGGTCTGATCGGCTCGC 247

QY 241 TGTGCGTGTACGCGCGGTCAACCGTTCGTTTCATCGAGACGCTTACCGGAGGTCT 300
DB 248 TGTGCGTGTACGCGCGGTCAACCGTTCGTTTCATCGAAACGCGCTACCGGAGGTGG 307

QY 301 CGGACCGAGTTGTACCGACGACATCCACTACTGACGCGCGCGACGAAGAGGACCGCCACG 360
DB 308 TCGACCGCGTGGTTAGCGACGAGATCGTGTACTTACCGCGACGAGGAGACCGCCACG 367

QY 361 TGGTGGCGGCGGCAACTCGCCGCTGGAGCGCAACGCGCGCTTACCGAGAGAGATCC 420
DB 368 TGGTGGCGGCGGCAACTCGCCGATCGATGCGGAGCGTCTGTTGTCGAGCGCGCGTGC 427

QY 421 TGGTTCGCGCGAAGGCGCGAGGTGGAGTTGCTGTTCGCGGACCGAGGTGCACTACATGG 480
DB 428 TGGTTCGCGCGAAGGCGCGAGGTGGAGTTGCTGTTCGCGGACCGAGGTGCACTACATGG 487

QY 481 ATGTCCTCGCGCGCGAGATGTTGCGGTTCGCGACCGCCATGATCCCGTTCCTCGAGCACG 540
DB 488 ACGTCTCGCGCGCGAGATGTTGCGGTGGCCACCGCGATGATTCCTTCCTGGAGCACG 547

QY 541 ACGACCGCAACCGTCCCTCATGGTGCCAAATCGATCGAGCGCGAGCGGTTCCGCTGTGTC 600
DB 548 ACGACCGCAACCGTCCCTCATGGGGGCAAAATCGATCGAGCGCGAGCGGTTCCGCTGTGTC 607

QY 601 GTAGCGAGGCTCC 613
DB 608 GTAGCGAGGCCCC 620
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RESULT 12

US-08-757-653-139/c

; Sequence 139, Application US/08757653

; Patent No. 5843689

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

```
;
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 139:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-139
```

Query Match 74.9%; Score 469; DB 2; Length 620;

Best Local Similarity 85.3%; Pred. No. 1.9e-96;

Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

```
QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACACGCGAGCTGCGAGTTCA 60
DB 613 TCCGCGCGTGGTGGCGCGATCAAGGAGTTCTTCGGAACACGCGAGCTGAGCCAATTCA 554

QY 61 TGGACCAAGAACACCGCTGTCGGGCGCTGACCCACAAGCGTCTGTGCGGCGTGGGCC 120
DB 553 TGGACCAAGAACACCGCTGTCGGGCGTTGACCTACAAGCGCGAGCTGTGGCGCTGGGCC 494

QY 121 CCGGTGCTGTGACCGCGTACCGCGCGCGCTTCGAGGTCCGCGAGTGCACCCCTCGCACT 180
DB 493 CCGGCGGTCTGTACGCTGAGCGTCCGCGGCTGGAGGTCCGCGAGTGCACCCCTCGCACT 434

QY 181 ACGGCGCGATGTGCCCGATCGAGACCCCGGAAGCGCCGAACATCGGCGCTGATCGGCTCGC 240
DB 433 ACGGCGCGATGTGCCCGATCGAAACCCCTGAGGGGCGCCAAATCGGTCTGATCGGCTCGC 374

QY 241 TGTGCGTGTACGCGCGGTCAACCGTTCGTTTCATCGAGACGCTTACCGGAGGTCT 300
DB 373 TGTGCGTGTACGCGCGGTCAACCGTTCGTTTCATCGAAACCGCTTACCGGAGGTGG 314

QY 301 CGGACCGAGTTGTCAACCGAGACATCCACTACCTGACGCGCGCGACGAAGAGGACCGCCACG 360
DB 313 TCGACGCGGTGGTTAGCGACGAGATCGTGTACTGTACCGCGCGAGGAGGACCGCCACG 254

QY 361 TGGTGGCGGCGGCAACTCGCCCGTGAACGCGCAACCGCGCGCTTACCGAGAGAGATCC 420
DB 253 TGGTGGCGGCGGCAATTCCGCGATCGATCGGAGCGGTTCGCTTCGTGAGCGCGCGTGC 194

QY 421 TGGTTCGCGCGAAGGCGCGAGGTGGAGTTGCTGTTCGCGGACCGAGGTGCACTACATGG 480
DB 193 TGGTTCGCGCGAAGGCGCGAGGTGGAGTTGCTGTTCGCTCTGTGAGGTGCACTACATGG 134
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QY 481 ATGCTCGCGCGCCAGATGTTGCTCGGTCGACGCCCATGATCCGTTCTCTCGAGCAG 540  
Db 133 AGCTCTCGCGCGCCAGATGTTGCTCGGTCGACGCCCATGATCCGTTCTCTCGAGCAG 74  
QY 541 ACGACGCCCAACCGTGCCTCATGGGTGCAACATGACGCGCCAGCGGTTCCGCTGGTGC 600  
Db 73 ACGACGCCCAACCGTGCCTCATGGGTGCAACATGACGCGCCAGCGGTTCCGCTGGTGC 14  
QY 601 GTAGCGAGGCTCC 613  
Db 13 GTAGCGAGGCTCC 1  
RESULT 13  
US-08-757-653-140/c  
; Sequence 140, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable PEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 140:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-140  
Query Match 74.9%; Score 469; DB 2; Length 620;  
Best Local Similarity 85.3%; Pred. No. 1.9e-96;  
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;  
QY 1 TCGCTCCGTCGTGGCGCGATCAAGGAGTTCTTGGAAACGACGAGCTGTGCGAGTTCA 60  
Db 613 TCGGCGGTGTGCGCGCGATCAAGGAGTTCTTGGCAACGACGAGCTGTGCGAGTTCA 554  
QY 61 TGGACCAAGCAACCGCTGTGCGGCTGACCCCAAGCGTCTGTGCGGCGTGGGC 120  
Db 553 TGGACCAAGCAACCGCTGTGCGGCTGTGCGGCTGTGCGGCTGTGCGGCTGTGGGC 494  
QY 121 CCGGTGTGTGACCCGTGACCGCGCGCTCGAGGTTCGCGACGTGACCCCTCGCACT 180  
Db 493 CCGGCGGTCTGTACGTGAGCTGCGCGGCTGAGGTTCGCGACGTGACCCCTCGCACT 434  
QY 181 ACGGCGGATGTGCGCGATCGAGACCCCGGAAGCGCGCAACATCGGCTGTGATCGGCTCGC 240

Db 433 ACGGCGGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGTGATCGGCTCGC 374  
QY 241 TGTCTCGTGTAGCGCGGCTCAACCCGTTTCGGTTTCATCGAGACGCTTTACCGGAAGGTCT 300  
Db 373 TGTCTCGTGTAGCGCGGCTCAACCCGTTTCGGTTTCATCGAAACGCGCTACCGCAAGGTGG 314  
QY 301 CGGACGAGTTGTACACGACGACATCTACTGACGCGCGACGAAAGAGGACCGCGCAGC 360  
Db 313 TCGACGCGGTGTGTTAGCGACGAGATCGTGTACTTACCTGACCGCGACGAGGAGGACCGCCAGC 254  
QY 361 TGGTGGCGCAGCGCAACTCGCCGCTGGAGCGCAACCGCGCTTACCGGAGGAGAGATCC 420  
Db 253 TGGTGGCACAGCCCAATTGCGCGATCGATGCGGACGCTTCTGTCGAGCCCGCGGTGC 194  
QY 421 TGGTTTCGCGCAAGGCGCGGAGGTGAGTTCTGTGTCGCGGACCGCATGATCCGTTCTCTCGAGCAGC 480  
Db 193 TGGTCCGCGCAAGCGCGGCGAGGTGAGTAGTACGTGCTCCTCGTCTGAGGTGAGTACATGG 134  
QY 481 ATGCTCTCGCGCGCCAGATGTTGCTCGGTCGCGACCGCCATGATCCGTTCTCTCGAGCAGC 540  
Db 133 ACGTCTCGCGCGCCAGATGTTGCTCGGTCGCGACCGCCATGATCCGTTCTCTCGAGCAGC 74  
QY 541 ACGACGCCCAACCGTGCCTCATGGGTGCAACATGACGCGCGGTTCCGCTGGTGC 600  
Db 73 ACGACGCCCAACCGTGCCTCATGGGTGCAACATGACGCGCGGTTCCGCTGGTGC 14  
QY 601 GTAGCGAGGCTCC 613  
Db 13 GTAGCGAGGCTCC 1  
RESULT 14  
US-08-520-946-136  
; Sequence 136, Application US/08520946  
; Patent No. 6372424  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; APPLICANT: LYAMICHEV, VICTOR I.  
; APPLICANT: OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; TITLE OF INVENTION: PATHOGENS  
; NUMBER OF SEQUENCES: 160  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/520,946  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 136:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)

US-08-520-946-136

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Query Match          74.9%; Score 469; DB 3; Length 620;
Best Local Similarity 85.3%; Pred. No. 1.9e-96;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCCAGCCAGCTGTCGCAAGTTCA 60
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 8 TCCGCGCGTGGTCCCGCGATCAAGGAGTTCTTCGGAACCCAGCCAGCTGAGCCAAATTC 67
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 61 TGGACCAAGAACACCCGCTGTCGGGCTGACCCCAAGCGTCTGTCGGGCGTGGGCC 120
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 68 TGGACCAAGAACACCCGCTGTCGGGCTGACCCCAAGCGTCTGTCGGGCGTGGGCC 127
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 121 CCGGTGGTCTGACCGCTGACCGCGCGCTCGAGGTCGGGAGTCCGACGTGCACCCCTCGCACT 180
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 128 CCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGTCCGGACGTGCACCCGTGCGCACT 187
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 181 ACGGCGGATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCTGATCGGCTCGC 240
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 188 ACGGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC 247
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 241 TGTGCGGTGACCGCGGGTCAACCCGTTGCTTTCATCGAGACGCTTACCGGAAGTCT 300
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 248 TGTGCGGTGACCGCGGGTCAACCCGTTGCTTTCATCGAAACCGCTTACCGCAAGGTGG 307
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 301 CGGACCGAGTTGTCAACGACGACATCCACTACCTGACGCGCGACGAGGACCGCCACG 360
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 308 TCGACCGCGTGGTTAGCGACGAGATCTGTACTGACCGCGACGAGGAGACCGCCACG 367
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 361 TGGTGGCGAGGCAACTCGCCGCTGAGACCGCAACCGCGCTTCAACGAGGAGAGATCC 420
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 368 TGGTGGCACAGGCCAATTCGCGATCGATCGGAGTCCGGAGTCCGTTCTGTCGAGCGCGGTGC 427
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 421 TGGTTCGCGGACGAGGCGCGAGTGGAGTTCGTGTCGGGACCGAGTCTGACTACATGG 480
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 428 TGGTTCGCGGACGAGGCGCGAGTGGAGTACGTGCTGCTGCTGAGTGGATACATGG 487
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 481 ATGTCTCGCGCGGCGAGATGTGTGCTGCGGACCGCATGATCCCGTTCTCTCGAGACG 540
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 488 ACGTCTCGCGCGGCGAGATGTGTGCTGCGGACCGCATGATCCCTTCTCTGAGGACG 547
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 541 ACGACGCAACCGTCCCTCATGGTGCACATGACGCGGACGCGGTTCCGCTGGTGC 600
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 548 ACGACGCAACCGTCCCTCATGGGCGCAACATGACGCGGACGCGGTCGCGTGGTCC 607
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 601 GTAGCGAGGCTCC 613
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 608 GTAGCGAGGCCCC 620
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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RESULT 15

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US-08-520-946-137
; Sequence 137, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
```

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SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/520,946
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-520-946-137
```

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Query Match          74.9%; Score 469; DB 3; Length 620;
Best Local Similarity 85.3%; Pred. No. 1.9e-96;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCCAGCCAGCTGTCGCAAGTTCA 60
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 61 TGGACCAAGAACACCCGCTGTCGGGCTGACCCCAAGCGTCTGTCGGGCGTGGGCC 120
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 68 TGGACCAAGAACACCCGCTGTCGGGCTGACCCCAAGCGTCTGTCGGGCGTGGGCC 127
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 121 CCGGTGGTCTGACCGCTGACCGCGCGCTCGAGGTCGGGAGTCCGACGTGCACCCCTCGCACT 180
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 128 CCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGTCCGGACGTGCACCCGTGCGCACT 187
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 181 ACGGCGGATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCTGATCGGCTCGC 240
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 188 ACGGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC 247
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 241 TGTGCGGTGACCGCGGGTCAACCCGTTGCTTTCATCGAGACGCTTACCGGAAGTCT 300
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 248 TGTGCGGTGACCGCGGGTCAACCCGTTGCTTTCATCGAAACCGCTTACCGCAAGGTGG 307
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 301 CGGACCGAGTTGTCAACGACGACATCCACTACCTGACGCGCGACGAGGACCGCCACG 360
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 308 TCGACCGCGTGGTTAGCGACGAGATCTGTACTGACCGCGACGAGGAGACCGCCACG 367
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 361 TGGTGGCGAGGCAACTCGCCGCTGAGACCGCAACCGCGCTTCAACGAGGAGAGATCC 420
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 368 TGGTGGCACAGGCCAATTCGCGATCGATCGGAGTCCGGAGTCCGTTCTGTCGAGCGCGGTGC 427
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 421 TGGTTCGCGGACGAGGCGCGAGTGGAGTTCGTGTCGGGACCGAGTCTGACTACATGG 480
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 428 TGGTTCGCGGACGAGGCGCGAGTGGAGTACGTGCTGCTGCTGAGTGGATACATGG 487
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 481 ATGTCTCGCGCGGCGAGATGTGTGCTGCGGACCGCATGATCCCGTTCTCTCGAGACG 540
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 488 ACGTCTCGCGCGGCGAGATGTGTGCTGCGGACCGCATGATCCCTTCTCTGAGGACG 547
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 541 ACGACGCAACCGTCCCTCATGGTGCACATGACGCGGACGCGGTTCCGCTGGTGC 600
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 548 ACGACGCAACCGTCCCTCATGGGCGCAACATGACGCGGACGCGGTCGCGTGGTCC 607
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 601 GTAGCGAGGCTCC 613
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 608 GTAGCGAGGCCCC 620
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
```

Search completed: August 24, 2005, 22:24:02  
Job time : 103.866 secs

	Query Match	100.00%	Score 626;	DB 9;	Length 626;
	Best Local Similarity	100.00%	Pred. No. 2.1e-151;		
	Matches 626;	Conservative	0;	Mismatches	0; Indels
					0; Gaps
Qy	1	TCGGTCCCGTCGTGGCGGGCGATCAAGAGAGTTCTTCGGAACACAGCCAGCTGTCCGAGTTCA	60		
Db	1	TCGGTCCCGTCGTGGCGGGCGATCAAGAGAGTTCTTCGGAACACAGCCAGCTGTCCGAGTTCA	60		

```
QY 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAAAGCGTGTCTGTGCGCGCTGGGCC 120
Db |||||||
61 TGGACCAAGAACAAACCGCTGTGCGGCCCTGAACCAAAAGCGTGTCTGTGCGCGCTGGGCC 120
QY 121 CCGTGGTCTGACCCCGTACCGCGCGCGCTCGAGGTCGGGACGTGACACCCCTCGCACT 180
Db |||||||
121 CCGTGGTCTGACCCCGTACCGCGCGCGCTCGAGGTCGGGACGTGACACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCCGCATCGAGACCCCGGAAGGCCGGAACATCGGCGCTGATCGGCTGCG 240
Db |||||||
181 ACGGCGCATGTGCCCGCATCGAGACCCCGGAAGGCCGGAACATCGGCGCTGATCGGCTGCG 240
QY 241 TGTGGTGTACCGCGGGTCAACCGTTTCGTTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||||||
241 TGTGGTGTACCGCGGGTCAACCGTTTCGTTTCATCGAGACGCTTTACCGGAAGGTCT 300
QY 301 CGGACGGAGTTGTACCGACGACATCCACTACCTGACGGCCGACGGAAGAGACCGCCACG 360
Db |||||||
301 CGGACGGAGTTGTACCGACGACATCCACTACCTGACGGCCGACGGAAGAGACCGCCACG 360
QY 361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCCAAACCGCGCTTCAACCGAGGAGAATCC 420
Db |||||||
361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCCAAACCGCGCTTCAACCGAGGAGAATCC 420
QY 421 TGGTTCCGCCCAAGGGCGGAGGTGGAGTTGCTGTGCGGACCGAGGTGACTACATGG 480
Db |||||||
421 TGGTTCCGCCCAAGGGCGGAGGTGGAGTTGCTGTGCGGACCGAGGTGACTACATGG 480
QY 481 ATGTTCTCGCGCGCCAGATGTTGTTGCTGCGGACCGCCATGATCCCGTTCTCGAGCACG 540
Db |||||||
481 ATGTTCTCGCGCGCCAGATGTTGTTGCTGCGGACCGCCATGATCCCGTTCTCGAGCACG 540
QY 541 ACGACGCCAAACCGTCCCTCATGGTGCCAAATGTCAGCGCGCAGCGGTTCGGTGGTGC 600
Db |||||||
541 ACGACGCCAAACCGTCCCTCATGGTGCCAAATGTCAGCGCGCAGCGGTTCGGTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGTCGTGCTACC 626
Db |||||||
601 GTAGCGAGGCTCCGCTGTCGTGCTACC 626
```

## RESULT 2

```
US-09-285-306-47
; Sequence 47, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 47
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
```

## US-09-285-306-47

```
Query Match 100.0%; Score 626; DB 9; Length 626;
Best Local Similarity 100.0%; Pred. No. 2.1e-151;
Matches 626; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTGTGCGCGCGCATCAAGGAGTTCTTCGGAACACGACGCTGTGCGAGTTCA 60
Db 1 TCCGTCCCGTGTGCGCGCGCATCAAGGAGTTCTTCGGAACACGACGCTGTGCGAGTTCA 60
QY 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAAAGCGTGTCTGTGCGCGCTGGGCC 120
Db |||||||
```

```
Db 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAAAGCGTGTCTGTGCGCGCTGGGCC 120
QY 121 CCGTGGTCTGACCCCGTACCGCGCGCGCTCGAGGTCGGGACGTGACACCCCTCGCACT 180
Db |||||||
121 CCGTGGTCTGACCCCGTACCGCGCGCGCTCGAGGTCGGGACGTGACACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCCGCATCGAGACCCCGGAAGGCCGGAACATCGGCGCTGATCGGCTGCG 240
Db |||||||
181 ACGGCGCATGTGCCCGCATCGAGACCCCGGAAGGCCGGAACATCGGCGCTGATCGGCTGCG 240
QY 241 TGTGGTGTACCGCGGGTCAACCGTTTCGTTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||||||
241 TGTGGTGTACCGCGGGTCAACCGTTTCGTTTCATCGAGACGCTTTACCGGAAGGTCT 300
QY 301 CGGACGGAGTTGTACCGACGACATCCACTACCTGACGGCCGACGGAAGAGACCGCCACG 360
Db |||||||
301 CGGACGGAGTTGTACCGACGACATCCACTACCTGACGGCCGACGGAAGAGACCGCCACG 360
QY 361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCCAAACCGCGCTTCAACCGAGGAGAATCC 420
Db |||||||
361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCCAAACCGCGCTTCAACCGAGGAGAATCC 420
QY 421 TGGTTCCGCCCAAGGGCGGAGGTGGAGTTGCTGTGCGGACCGAGGTGACTACATGG 480
Db |||||||
421 TGGTTCCGCCCAAGGGCGGAGGTGGAGTTGCTGTGCGGACCGAGGTGACTACATGG 480
QY 481 ATGTTCTCGCGCGCCAGATGTTGTTGCTGCGGACCGCCATGATCCCGTTCTCGAGCACG 540
Db |||||||
481 ATGTTCTCGCGCGCCAGATGTTGTTGCTGCGGACCGCCATGATCCCGTTCTCGAGCACG 540
QY 541 ACGACGCCAAACCGTCCCTCATGGTGCCAAATGTCAGCGCGCAGCGGTTCGGTGGTGC 600
Db |||||||
541 ACGACGCCAAACCGTCCCTCATGGTGCCAAATGTCAGCGCGCAGCGGTTCGGTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGTCGTGCTACC 626
Db |||||||
601 GTAGCGAGGCTCCGCTGTCGTGCTACC 626
```

## RESULT 3

```
US-09-285-306-45
; Sequence 45, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
```

## US-09-285-306-45

```
Query Match 99.2%; Score 621.2; DB 9; Length 626;
Best Local Similarity 99.5%; Pred. No. 3.7e-150;
Matches 623; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTGTGCGCGCGCATCAAGGAGTTCTTCGGAACACGACGCTGTGCGAGTTCA 60
Db 1 TCCGTCCCGTGTGCGCGCGCATCAAGGAGTTCTTCGGAACACGACGCTGTGCGAGTTCA 60
QY 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAAAGCGTGTCTGTGCGCGCTGGGCC 120
Db 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAAAGCGTGTCTGTGCGCGCTGGGCC 120
```

```
QY 121 CCGGTGGTCTGACCCGGTGAACCGCGCGGCTCGAGGTCGGGACGTCACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGGTGAACCGCGCGGCTCGAGGTCGGGACGTCACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCCGAAATCATCGGCTGATCGGCTGCG 240
Db 181 ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCCGAAATCATCGGCTGATCGGCTGCG 240
QY 241 TGTCCGTGTATCGCGGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 241 TGTCCGTGTATCGCGGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
QY 301 CGGACGGAGTTGTCAACCGACGATCCACTACCTGACCGGCGGACGAAAGAGGACCGCCAG 360
Db 301 CGGACGGAGTTGTCAACCGACGATCCACTACCTGACCGGCGGACGAAAGAGGACCGCCAG 360
QY 361 TGGTGGCGCAGGCCAACTCGCCGCTGGACGCCAACAGCGCGCTTCAACCGAGGAGAGATCC 420
Db 361 TGGTGGCGCAGGCCAACTCGCCGCTGGACGCCAACAGCGCGCTTCAACCGAGGAGAGATCC 420
QY 421 TGGTTCGCGCAAGGCGCGAGGTGGAGTTTCTGTTCGGCGCACCGGCTTCCCTCGAGCAG 480
Db 421 TGGTTCGCGCAAGGCGCGAGGTGGAGTTTCTGTTCGGCGCACCGGCTTCCCTCGAGCAG 480
QY 481 ATGTCTCGCGCGCAGATGTGTCTGCGGACCGGCTATGATCCGTTCCCTCGAGCAG 540
Db 481 ATGTCTCGCGCGCAGATGTGTCTGCGGACCGGCTATGATCCGTTCCCTCGAGCAG 540
QY 541 ACGACGCCAACCGTGCCTCATGGTGCCAAATGACGCGCGGCTTCCGCTGGTG 600
Db 541 ACGACGCCAACCGTGCCTCATGGTGCCAAATGACGCGCGGCTTCCGCTGGTG 600
QY 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
Db 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
```

## RESULT 4

US-09-285-306-46

; Sequence 46, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 46

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-46

Query Match 99.2%; Score 621.2; DB 9; Length 626;

Best Local Similarity 99.5%; Pred. No. 3.7e-150;

Matches 623; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
QY 1 TCCGTCCTCGTGGCGGCGATCAAGAGTTCTTCGGAAACCAAGCAGCTGTGCGAGTTCA 60
Db 1 TCCGTCCTCGTGGCGGCGATCAAGAGTTCTTCGGAAACCAAGCAGCTGTGCGAGTTCA 60
QY 61 TGGACAGAAACCCCGTGTTCGGGCTGACCCCAAGCGTGTGTGCGGCGCTGGGCC 120
Db 61 TGGACAGAAACCCCGTGTTCGGGCTGACCCCAAGCGTGTGTGCGGCGCTGGGCC 120
QY 121 CCGGTGGTCTGACCCGGTGAACCGCGCGGCTCGAGGTCGGGACGTCACCCCTCGCACT 180
```

```
Db 121 CCGGTGGTCTGACCCGGTGAACCGCGCGGCTCGAGGTCGGGACGTCACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCCGAAATCATCGGCTGATCGGCTGCG 240
Db 181 ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCCGAAATCATCGGCTGATCGGCTGCG 240
QY 241 TGTCCGTGTATCGCGGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 241 TGTCCGTGTATCGCGGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
QY 301 CGGACGGAGTTGTCAACCGACGATCCACTACCTGACCGGCGGACGAAAGAGGACCGCCAG 360
Db 301 CGGACGGAGTTGTCAACCGACGATCCACTACCTGACCGGCGGACGAAAGAGGACCGCCAG 360
QY 361 TGGTGGCGCAGGCCAACTCGCCGCTGGACGCCAACAGCGCGCTTCAACCGAGGAGAGATCC 420
Db 361 TGGTGGCGCAGGCCAACTCGCCGCTGGACGCCAACAGCGCGCTTCAACCGAGGAGAGATCC 420
QY 421 TGGTTCGCGCAAGGCGCGAGGTGGAGTTTCTGTTCGGCGCACCGGCTTCCCTCGAGCAG 480
Db 421 TGGTTCGCGCAAGGCGCGAGGTGGAGTTTCTGTTCGGCGCACCGGCTTCCCTCGAGCAG 480
QY 481 ATGTCTCGCGCGCAGATGTGTCTGCGGACCGGCTATGATCCGTTCCCTCGAGCAG 540
Db 481 ATGTCTCGCGCGCAGATGTGTCTGCGGACCGGCTATGATCCGTTCCCTCGAGCAG 540
QY 541 ACGACGCCAACCGTGCCTCATGGTGCCAAATGACGCGCGGCTTCCGCTGGTG 600
Db 541 ACGACGCCAACCGTGCCTCATGGTGCCAAATGACGCGCGGCTTCCGCTGGTG 600
QY 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
Db 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
```

## RESULT 5

US-09-285-306-39

; Sequence 39, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 39

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-39

Query Match 93.1%; Score 582.8; DB 9; Length 626;

Best Local Similarity 95.7%; Pred. No. 2.7e-140;

Matches 599; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

```
QY 1 TCCGTCCTCGTGGCGGCGATCAAGAGTTCTTCGGAAACCAAGCAGCTGTGCGAGTTCA 60
Db 1 TCCGTCCTCGTGGCGGCGATCAAGAGTTCTTCGGAAACCAAGCAGCTGTGCGAGTTCA 60
QY 61 TGGACAGAAACCCCGTGTTCGGGCTGACCCCAAGCGTGTGTGCGGCGCTGGGCC 120
Db 61 TGGACAGAAACCCCGTGTTCGGGCTGACCCCAAGCGTGTGTGCGGCGCTGGGCC 120
QY 121 CCGGTGGTCTGACCCGGTGAACCGCGCGGCTCGAGGTCGGGACGTCACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGGTGAACCGCGCGGCTCGAGGTCGGGACGTCACCCCTCGCACT 180
```



```
QY 181 ACGGCCGATGTGCCGATCGAGACCCCGGAAGGCCCGAACAATCGGCTGTGATCGGCTCGC 240
Db      |||
QY 181 ACGGCCGATGTGCCGATCGAGACCCCGGAAGGCCCGAACAATCGGCTGTGATCGGTTCCG 240
Db      |||
QY 241 TGTCCGTTACCGCGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db      |||
QY 241 TGTCCGTTACCGCGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGGTGT 300
Db      |||
QY 301 CGGACGAGTTGTACCGACGACATCTACTTACCTGACGGCCGACGAAGAGACCGCCACG 360
Db      |||
QY 301 CCGAGGTTGTCTACCGACGACATCTACTTACCTGACGGCCGACGAAGAGACCGCCACG 360
Db      |||
QY 361 TGGTGGCGAGCCAACTCGCCGTTGGAGCGCAACCGCCGTTTACCAGAGAGAATGCC 420
Db      |||
QY 361 TCGTGGCACAGGCCAACTCGCCGTTGGAGCGCGACCGCCGTTTACCAGAGAGAATGCC 420
Db      |||
QY 421 TGGTTCGCGCAAGGGCGGAGGTGGAGTTCTGTCTCGGCGACCGAGTGCACATACATGG 480
Db      |||
QY 421 TGGTTCGCGCAAGGGGTGGAGTTCGTTCTCGGCGACCGAGGTGCACATACATGG 480
Db      |||
QY 481 ATGTCTCGCCGCGCAGATGTGTCTCGGTTCGGACCGCCATGATCCCGTTCTCGAGCACG 540
Db      |||
QY 481 ACGTCTCGCCGCGCAGATGTGTCTCGGTTCGGACCGCCATGATCCCGTTCTCGAGCACG 540
Db      |||
QY 541 ACGACGCCAAACCGTGCCCTCATGTGGTGCCAAATGCAATGCAAGCGCGTTCCGTTGGTGC 600
Db      |||
QY 541 ACGACGCCAAACCGTGCCCTCATGTGGTGCCAAATGCAATGCAAGCGCGTTCCGTTGGTGC 600
Db      |||
QY 601 GTAGCGAGGCTCCGCTGCTCGGTACC 626
Db      |||
QY 601 GTAGCGAGGCCCCGCTGCTCGGTACC 626
Db      |||
```

## RESULT 6

US-09-285-306-30

; Sequence 30, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 30

; LENGTH: 652

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-30

```
Query Match      92.8%; Score 581.2; DB 9; Length 652;
Best Local Similarity 95.5%; Pred. No. 7e-140;
Matches 598; Conservative 0; Mismatches 28; Indels 0; Gaps 0;
```

```
QY 1 TCCGTCCCGTGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCGAGTGTTCGAGTTCA 60
Db 19 TCCGTCCCGTGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCGAGTGTTCGAGTTCA 78
QY 61 TGGACCAAGAACCAACCCGCTGTGGGCTTGACCCCAAGCGTGTGTTCGGCGCTGGGCC 120
Db 79 TGGACCAAGAACCAACCCGCTGTGGGCTTGACCCCAAGCGTGTGTTCGGCGCTGGGCC 138
QY 121 CCGGTGTTCTGACCCGTTGACCGCGCTTCGAGGTTCCGAGGTTCGAGACGTGACACCCCTCGCACT 180
Db 139 CCGGTGTTCTGACTCGTACCGCGCGGCTTTGAGGTTCCGCGACGTGACACCCCTCGCACT 198
QY 181 ACGGCCGATGTGCCGATCGAGACCCCGGAAGGCCCGAACAATCGGCTGTGATCGGCTCGC 240
Db      |||
```

```
Db 199 ACGGCCGATGTGCCGATCGAGACCCCGGAAGGCCCGAACAATCGGCTGTGATCGGTTCCG 258
QY 241 TGTCCGTTACCGCGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db      |||
QY 259 TGTCCGTTACCGCGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGGTGT 318
Db      |||
QY 301 CGGACGAGTTGTACCGACGACATCTACTTACCTGACGGCCGACGAAGAGACCGCCACG 360
Db 319 CCGAGGTTGTCTCACCGACGAGATCTACTTACCTGACCGCCGACGAAGAGACCGCCACG 378
QY 361 TGGTGGCGAGCCAACTCGCCGTTGGAGCGCAACCGCCGTTTACCAGAGAGAATGCC 420
Db 379 TGGTGGCGACAGCCAACTCGCCGTTGGATGCGACGGCCGCTTACCAGAGACAAGATGCC 438
QY 421 TGGTTCGCGCAAGGGCGGAGGTGGAGTTCTGTCTCGGCGACCGAGTGCACATACATGG 480
Db 439 TGGTTCGCGCAAGGGGTGGAGTTCGTTCTCGGCGACCGAGTGCACATACATGG 498
QY 481 ATGTCTCGCCGCGCAGATGTGTCTCGGTTCGGACCGCCATGATCCCGTTCTCGAGCACG 540
Db 499 ACGTCTCGCGCGCAGATGTGTCTCGGTTCGGACCGCCATGATCCCGTTCTCGAGCACG 558
QY 541 ACGACGCCAAACCGTGCCCTCATGTGGTGCCAAATGCAATGCAAGCGCGTTCCGTTGGTGC 600
Db 559 ACGACGCCAAACCGTGCCCTCATGTGGTGCCAAATGCAATGCAAGCGCGTTCCGTTGGTGC 618
QY 601 GTAGCGAGGCTCCGCTGCTCGGTACC 626
Db 619 GCAGCGAGGCCCCGCTGCTCGGTACC 644
```

## RESULT 7

US-09-285-306-40

; Sequence 40, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 40

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-40

```
Query Match      92.6%; Score 579.6; DB 9; Length 626;
Best Local Similarity 95.4%; Pred. No. 1.8e-139;
Matches 597; Conservative 0; Mismatches 29; Indels 0; Gaps 0;
```

```
QY 1 TCCGTCCCGTGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCGAGTGTTCGAGTTCA 60
Db 1 TCCGTCCCGTGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCGAGTGTTCGAGTTCA 60
QY 61 TGGACCAAGAACCAACCCGCTGTGGGCTTGACCCCAAGCGTGTGTTCGGCGCTGGGCC 120
Db 61 TGGACCAAGAACCAACCCGCTGTGGGCTTGACCCCAAGCGTGTGTTCGGCGCTGGGCC 120
QY 121 CCGGTGTTCTGACCCGTTGACCGCGCTTCGAGGTTCCGAGGTTCGAGACGTGACACCCCTCGCACT 180
Db 121 CCGGTGTTCTGACCCGTTGACCGCGCTTCGAGGTTCCGAGGTTCGAGACGTGACACCCCTCGCACT 180
QY 181 ACGGCCGATGTGCCGATCGAGACCCCGGAAGGCCCGAACAATCGGCTGTGATCGGCTCGC 240
Db 181 ACGGCCGATGTGCCGATCGAGACCCCGGAAGGCCCGAACAATCGGCTGTGATCGGTTCCG 240
```

```
QY 241 TGTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTCT 300
Db 241 TGTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTCT 300
QY 301 CGGACGGAGTTGTCAACCGACGATCCACTACCTGACCGCCGACGAAGAGGACCGCCACG 360
Db 301 CGGACGGAGTTGTCAACCGACGATCCACTACCTGACCGCCGACGAAGAGGACCGCCACG 360
QY 361 TGGTGGCGAGCCAACTCGCCGTGGAGCCAAACCGCGCTTACCGAGGGAAGATCC 420
Db 361 TGGTGGCGAGCCAACTCGCCGTGGAGCCAAACCGCGCTTACCGAGGGAAGATCC 420
QY 421 TGGTTCGCGCAAGCGCGGAGGTGGAGTTCGTCGCGACCGAGGTTCGACTACATGG 480
Db 421 TGGTTCGCGCAAGCGCGGAGGTGGAGTTCGTCGCGACCGAGGTTCGACTACATGG 480
QY 481 ATGTCTCGCGCGCCAGATGTGTGTCGCGACCGCCATGATCCGTTCTCGAGCACG 540
Db 481 ATGTCTCGCGCGCCAGATGTGTGTCGCGACCGCCATGATCCGTTCTCGAGCACG 540
QY 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAAATGCGGTCGCGACCGCGGTTCGGTGGTC 600
Db 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAAATGCGGTCGCGACCGCGGTTCGGTGGTC 600
QY 601 GTAGCGAGGCTCGGTGGTTCGTTACC 626
Db 601 GTAGCGAGGCTCGGTGGTTCGTTACC 626
```

## RESULT 8

```
US-09-285-306-33
; Sequence 33, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 33
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-33
```

```
Query Match 92.3%; Score 578; DB 9; Length 626;
Best Local Similarity 95.2%; Pred. No. 4.6e-139;
Matches 596; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

QY 1 TCCGTCCTGTCGCGCGGATCAAGAGTTCTTCGGAACACGCGCTGTCGAGTTCA 60
Db 1 TCCGTCCTGTCGCGCGGATCAAGAGTTCTTCGGAACACGCGCTGTCGAGTTCA 60
QY 61 TGGACAGAAACACCGCTGTCGCGCTGACCCACAAAGCGTCTGTCGGCGCTGGGCC 120
Db 61 TGGACAGAAACACCGCTGTCGCGCTGACCCACAAAGCGTCTGTCGGCGCTGGGCC 120
QY 121 CCGGTGGTCTGACCCGCTGACCGCGCTCGAGTCCGCGACGTGCACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGCTGACCGCGCTCGAGTCCGCGACGTGCACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCGATCGAGACCCCGAAGGCGCGAAACATCGGCTGTGATCGGCTGC 240
Db 181 ACGGCGCATGTGCCGATCGAGACCCCGAAGGCGCGAAACATCGGCTGTGATCGGCTGC 240
QY 241 TGTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTCT 300
```

```
Db 241 TGTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTGT 300
QY 301 CGGACGGAGTTGTCAACCGACGATCCACTACCTGACCGCCGACGAAGAGGACCGCCACG 360
Db 301 CGGACGGAGTTGTCAACCGACGATCCACTACCTGACCGCCGACGAAGAGGACCGCCACG 360
QY 361 TGGTGGCGAGCCAACTCGCCGTGGAGCCAAACCGCGCTTACCGAGGGAAGATCC 420
Db 361 TGGTGGCGAGCCAACTCGCCGTGGAGCCAAACCGCGCTTACCGAGGGAAGATCC 420
QY 421 TGGTTCGCGCAAGCGCGGAGGTGGAGTTCGTCGCGACCGAGGTTCGACTACATGG 480
Db 421 TGGTTCGCGCAAGCGCGGAGGTGGAGTTCGTCGCGACCGAGGTTCGACTACATGG 480
QY 481 ATGTCTCGCGCGCCAGATGTGTGTCGCGACCGCCATGATCCGTTCTCGAGCACG 540
Db 481 ATGTCTCGCGCGCCAGATGTGTGTCGCGACCGCCATGATCCGTTCTCGAGCACG 540
QY 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAAATGCGGTCGCGACCGCGGTTCGGTGGTC 600
Db 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAAATGCGGTCGCGACCGCGGTTCGGTGGTC 600
QY 601 GTAGCGAGGCTCGGTGGTTCGTTACC 626
Db 601 GTAGCGAGGCTCGGTGGTTCGTTACC 626
```

## RESULT 9

```
US-09-285-306-38
; Sequence 38, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 652
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-38
```

```
Query Match 92.3%; Score 578; DB 9; Length 652;
Best Local Similarity 95.2%; Pred. No. 4.6e-139;
Matches 596; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

QY 1 TCCGTCCTGTCGCGCGGATCAAGAGTTCTTCGGAACACGCGCTGTCGAGTTCA 60
Db 18 TCCGTCCTGTCGCGCGGATCAAGAGTTCTTCGGAACACGCGCTGTCGAGTTCA 77
QY 61 TGGACAGAAACACCGCTGTCGCGCTGACCCACAAAGCGTCTGTCGGCGCTGGGCC 120
Db 78 TGGACAGAAACACCGCTGTCGCGCTGACCCACAAAGCGTCTGTCGGCGCTGGGCC 137
QY 121 CCGGTGGTCTGACCCGCTGACCGCGCTCGAGTCCGCGACGTGCACCCCTCGCACT 180
Db 138 CCGGTGGTCTGACCCGCTGACCGCGCTCGAGTCCGCGACGTGCACCCCTCGCACT 197
QY 181 ACGGCGCATGTGCCGATCGAGACCCCGAAGGCGCGAAACATCGGCTGTGATCGGCTGC 240
Db 198 ACGGCGCATGTGCCGATCGAGACCCCGAAGGCGCGAAACATCGGCTGTGATCGGCTGC 257
QY 241 TGTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTCT 300
Db 258 TGTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTGT 317
```

Qy 301 CCGACGAGTTGTCTACCCGACGATCCACTACCTGACCGGCCGACGAAAGAGACCGCCACG 360  
Db |||||  
318 CCGAGGTTGTCTGTACACCGACGAGATCCACTACCTGACCGCCGACGAAAGAGACCGCCACG 377  
Qy |||||  
361 TGGTGGCCGAGGCCAACTCGCCCTGGAGCGCAACGGCCGCTTCAACGAGAGAAATCC 420  
Db |||||  
378 TCGTGGCACAGGCCAACTCGCTGTGGATGCGACCGCCGCTTCAACGAGAGCAAGATCC 437  
Qy |||||  
421 TGGTTCCGCGCAAGGGCGGAGGTGGAGTTCTGTGCGCGACCGAGGTCCGACTACATGG 480  
Db |||||  
438 TGGTCCGCGGTAAAGGTGGAGGTGCGAGTCTGCTCTCGCGACCGAGGTGACTACATGG 497  
Qy |||||  
481 ATGTCTCCCGCGCAGATGGTGTGCGTTCGCGACCGCCATGATCCCGTTCCTCGAGCACG 540  
Db |||||  
498 ACGTCTCGCCCGCCAAATGGTGTGCGTTCGCGACCGCCATGATCCCGTTCCTCGAGCACG 557  
Qy |||||  
541 ACGAGCCCAACGTCCTCTATGGTGCACATGCGACGCGCCAGCGGTTCCGCTGGTGC 600  
Db |||||  
558 ACGAGCCCAACGTCCTCTATGGTGCACATGCGACGCGCCAGCGGTTCCGCTGGTGC 617  
Qy |||||  
601 GTAGCGAGGCTCCGCTGGTCCGTACC 626  
Db |||||  
618 CGAGCGAGGCCCGCTGGTCCGTACC 643

## RESULT 10

US-09-285-306-31  
; Sequence 31, Application US/09285306A  
; Publication No. US20020187467A1

; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285.306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080.616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 31  
; TYPE: DNA  
; ORGANISM: Mycobacterium chelonae  
US-09-285-306-31

Query Match 91.8%; Score 574.8; DB 9; Length 626;  
Best Local Similarity 94.9%; Pred. No. 3.1e-138;  
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCGACGAGCTGTCGAGTTCA 60  
Db |||||  
1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCGACGAGCTGTCGAGTTCA 60  
Qy 61 TGGACCAAGAACAAACCCGCTTCGCGGCTTGACCCCAAGCGTCTGTTCGCGGCTGGGCC 120  
Db |||||  
61 TGGACCAAGAACAAACCCGCTTCGCGGCTTGACCCCAAGCGTCTGTTCGCGGCTGGGCC 120  
Qy 121 CCGTGTCTGACCGGTGACCGCGCGCTCGAGGTCCGGAAGTGGACCCCTCGGACT 180  
Db |||||  
121 CCGTGTCTGACCGGTGACCGCGCGCTCGAGGTCCGGAAGTGGACCCCTCGGACT 180  
Qy 181 ACGCGCGATGTGCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTGC 240  
Db |||||  
181 ACGCGCGATGTGCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTGC 240  
Qy 241 TGTGGTGTACCGCGGCTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGGTCT 300  
Db |||||  
241 TTTCCGTGTACCGCGGCTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGGTCT 300  
Qy 301 CCGACGAGTTGTCTACCCGACGATCCACTACCTGACCGGCCGACGAAAGAGACCGCCACG 360  
Db |||||

Db 301 CCGAGGTTGTCTGTACCCGACGAGATCCACTCTGACCGCCGACGAAAGAGACCGCCACG 360  
Qy |||||  
361 TGGTGGCGAGGCCAACTCGCCCTGGAGCGCAACGGCCGCTTCAACGAGAGAAATCC 420  
Db |||||  
361 TCGTGGCACAGGCCAACTCGCTGTGGATGCGGACCGCCGCTTCAACGAGAGCAAGATCC 420  
Qy |||||  
421 TGGTTCCGCGCAAGGGCGGAGGTGGAGTTCTGTGCGCGACCGAGGTCCGACTACATGG 480  
Db |||||  
421 TGGTCCGCGGTAAAGGTGGGAGGTTCGAGTTCTGTGCGCGACCGAGGTGACTACATGG 480  
Qy |||||  
481 ATGTCTCCCGCGCCAGATGGTGTGCGTTCGCGACCGCCATGATCCCGTTCCTCGAGCACG 540  
Db |||||  
481 ACGTCTCGCGCGCCAGATGGTGTGCGTTCGCGACCGCCATGATCCCGTTCCTCGAGCACG 540  
Qy |||||  
541 ACGAGCCCAACCGTCCTCTATGGTGCACATGCGACGCGCCAGCGGTTCCGCTGGTGC 600  
Db |||||  
541 ACGAGCCCAACCGTCCTCTATGGTGCACATGCGAGCGCCAGCGGTTCCGCTGGTGC 600  
Qy 601 GTAGCGAGGCTCCGCTGGTCCGTACC 626  
Db |||||  
601 CGAGCGAGGCCCGCTGGTCCGTACC 626

## RESULT 11

US-09-285-306-36  
; Sequence 36, Application US/09285306A  
; Publication No. US20020187467A1

; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285.306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER FILING DATE: 1998-04-03  
; EARLIER APPLICATION NUMBER: US 60/080.616  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 36  
; TYPE: DNA  
; ORGANISM: Mycobacterium chelonae  
US-09-285-306-36

Query Match 91.8%; Score 574.8; DB 9; Length 626;  
Best Local Similarity 94.9%; Pred. No. 3.1e-138;  
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCGACGAGCTGTCGAGTTCA 60  
Db |||||  
1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCGACGAGCTGTCGAGTTCA 60  
Qy 61 TGGACCAAGAACAAACCCGCTTCGCGGCTTGACCCCAAGCGTCTGTTCGCGGCTGGGCC 120  
Db |||||  
61 TGGACCAAGAACAAACCCGCTTCGCGGCTTGACCCCAAGCGTCTGTTCGCGGCTGGGCC 120  
Qy 121 CCGTGTCTGACCGGTGACCGCGCGCTTCGAGGTCCGCGAGTGCACCCCTCGGACT 180  
Db |||||  
121 CCGTGTCTGACCGGTGACCGCGCGCTTCGAGGTCCGCGAGTGCACCCCTCGGACT 180  
Qy 181 ACGCGCGATGTGCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTGC 240  
Db |||||  
181 ACGCGCGATGTGCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTGC 240  
Qy 241 TGTGGTGTACCGCGGCTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGGTCT 300  
Db |||||  
241 TTTCCGTGTACCGCGGCTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGGTCT 300  
Qy 301 CCGACGAGTTGTCTACCCGACGATCCACTACCTGACCGGCCGACGAAAGAGACCGCCACG 360  
Db |||||

QY 361 TGGTGGCAGGCGCAACTCGCCGTGGACGCCAACCGCGCTTCCACCGAGGAGAGATCC 420  
Db |||||  
QY 361 TGGTGGCAGGCGCAACTCGCCGTGGATGCCGACCGCCGCTTCCACCGAGGAGAGATCC 420  
Db |||||  
QY 421 TGGTTCCGCGCAAGCGCGGAGGTGGAGTTCGTGTCCGCGACCGAGGTGCACTACATGG 480  
Db |||||  
QY 421 TGGTCCGCGTAAGGGTGGGAGGTGAGTTCGTCTCGCGCAGCGAGGTGGACTACATGG 480  
Db |||||  
QY 481 ATGTTCTCGCGCGCCAGATGGTGTGGTTCGCGACCGCCATGATCCGCTTCGAGACAG 540  
Db |||||  
QY 481 ACGTTCTCGCGCGCCAGATGGTGTGGTTCGCGACCGCCATGATCCGCTTCGAGACAG 540  
Db |||||  
QY 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAACATCGACGCCAGCGGTTCGCTGGTGC 600  
Db |||||  
QY 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAACATCGACGCCAGCGGTTCGCTGGTGC 600  
Db |||||  
QY 601 GTAGCGAGGCTCCGCTGGTTCGATACC 626  
Db |||||  
QY 601 GCAGCGAGGCGCCGCTGGTTCGATACC 626  
Db |||||

## RESULT 12

US-09-285-306-37

; Sequence 37, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 37

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-37

Query Match 91.8%; Score 574.8; DB 9; Length 626;  
Best Local Similarity 94.9%; Pred. No. 3.1e-138;  
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCCTCGAACACGACGCTGTCGCAAGTTCA 60  
Db |||||  
QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCCTCGAACACGACGCTGTCGCAAGTTCA 60  
Db |||||  
QY 61 TGGACAGAAACACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120  
Db |||||  
QY 61 TGGACAGAAACACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTGCGGCTGTCGGGCC 120  
Db |||||  
QY 121 CCGGTGGTGTGACCGGTGACCGGCGGCTCGAGTTCGCGACAGTGCACCCCTCGCACT 180  
Db |||||  
QY 121 CCGGTGGTGTGACCGGTGACCGGCTCGAGTTCGCGACAGTGCACCCCTCGCACT 180  
Db |||||  
QY 181 ACGGCGCATGTGCCGATCGAGACCCCGGAAGGCCCGAACATCGSCCTGATCGGCTCGC 240  
Db |||||  
QY 181 ACGGCGCATGTGCCGATCGAGACCCCGGAAGGCCCGAACATCGSCCTGATCGGCTCGC 240  
Db |||||  
QY 241 TGTGGTGTACCGGGGTCAACCCGTTTCGCTTCATCGAGACGCTTACCGGAAGGTCT 300  
Db |||||  
QY 241 TTTGGTGTACCGGGGTCAACCCGTTTCGCTTCATCGAGACGCTTACCGGAAGGTCT 300  
Db |||||  
QY 301 CGGACGAGTGTGACCGGATCGATCACTA CTTGACGGCGCGACGAGGACCGCCAGG 360  
Db |||||  
QY 301 CGGAGGTTGTGTCACCGACGAGATCCACTACCTGACCCCGACGAGGACCGCCAGG 360  
Db |||||  
QY 361 TGGTGGCAGGCGCAACTCGCCGTGGACGCCAACCGCGCTTCCACCGAGGAGAGATCC 420  
Db |||||

Db 361 TCGTGGCAGGCGCAACTCGCTGTGGATGCCAGCGCGCTTCCACCGAGGAGAGATCC 420  
QY 421 TGGTTCCGCGCAAGCGCGGAGGTGGAGTTCGTGTCCGCGACCGAGGTGCACTACATGG 480  
Db |||||  
QY 421 TGGTCCGCGTAAGGGTGGGAGGTGAGTTCGTCTCGCGCAGCGAGGTGGACTACATGG 480  
Db |||||  
QY 481 ATGTTCTCGCGCGCCAGATGGTGTGGTTCGCGACCGCCATGATCCGCTTCGAGACAG 540  
Db |||||  
QY 481 ACGTTCTCGCGCGCCAGATGGTGTGGTTCGCGACCGCCATGATCCGCTTCGAGACAG 540  
Db |||||  
QY 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAACATCGACGCCAGCGGTTCGCTGGTGC 600  
Db |||||  
QY 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAACATCGACGCCAGCGGTTCGCTGGTGC 600  
Db |||||  
QY 601 GTAGCGAGGCTCCGCTGGTTCGATACC 626  
Db |||||  
QY 601 GCAGCGAGGCGCCGCTGGTTCGATACC 626  
Db |||||

## RESULT 13

US-09-285-306-41

; Sequence 41, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 41

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-41

Query Match 91.8%; Score 574.8; DB 9; Length 626;  
Best Local Similarity 94.9%; Pred. No. 3.1e-138;  
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCCTCGAACACGACGCTGTCGCAAGTTCA 60  
Db |||||  
QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCCTCGAACACGACGCTGTCGCAAGTTCA 60  
Db |||||  
QY 61 TGGACAGAAACACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120  
Db |||||  
QY 61 TGGACAGAAACACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTGCGGCTGTCGGGCC 120  
Db |||||  
QY 121 CCGGTGGTGTGACCGGTGACCGGCGGCTCGAGTTCGCGACAGTGCACCCCTCGCACT 180  
Db |||||  
QY 121 CCGGTGGTGTGACCGGTGACCGGCTCGAGTTCGCGACAGTGCACCCCTCGCACT 180  
Db |||||  
QY 181 ACGGCGCATGTGCCGATCGAGACCCCGGAAGGCCCGAACATCGSCCTGATCGGCTCGC 240  
Db |||||  
QY 181 ACGGCGCATGTGCCGATCGAGACCCCGGAAGGCCCGAACATCGSCCTGATCGGCTCGC 240  
Db |||||  
QY 241 TGTGGTGTACCGGGGTCAACCCGTTTCGCTTCATCGAGACGCTTACCGGAAGGTCT 300  
Db |||||  
QY 241 TTTGGTGTACCGGGGTCAACCCGTTTCGCTTCATCGAGACGCTTACCGGAAGGTCT 300  
Db |||||  
QY 301 CGGACGAGTGTGACCGGATCGATCACTA CTTGACGGCGCGACGAGGACCGCCAGG 360  
Db |||||  
QY 301 CGGAGGTTGTGTCACCGACGAGATCCACTACCTGACCCCGACGAGGACCGCCAGG 360  
Db |||||  
QY 361 TGGTGGCAGGCGCAACTCGCCGTGGACGCCAACCGCGCTTCCACCGAGGAGAGATCC 420  
Db |||||

Qy 421 TGGTTCGCCCAAGCGCGCGAGTGGAGTTCTGTGTCGGCGACCGAGGTGCACTACATGG 480  
Db 421 TGGTCCGCGCTAAGGGTGGCGAGTTCGATTCGTCTCGGCGACCGAGGTGACATACATGG 480  
Qy 481 ATGTTCTCCGCGCGCCAGATGTTGTCGTGCGGACCGCCATGATCCGTTCTTCGAGCACG 540  
Db 481 ACGTCTCGCGCGCCAGATGTTGTCGTGCGGACCGCCATGATCCGTTCTTCGAGCACG 540  
Qy 541 ACGAGCCCAACCGTCCCTCATGTTGTCGCAACATGACGCGCAGCGGTTCGCTGGTGC 600  
Db 541 ACGAGCCCAACCGTCCCTCATGTTGTCGCAACATGACGCGCAGCGGTTCGCTGGTGC 600  
Qy 601 GTAGCGAGGCTCCGCTGCTGCTGCTAC 626  
Db 601 GCAGCGAGGCGCGCTGCTGCTGCTAC 626

## RESULT 14

US-09-285-306-42

; Sequence 42, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 42

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-42

Query Match 91.8%; Score 574.8; DB 9; Length 626;

Best Local Similarity 94.9%; Pred. No. 3.1e-138;

Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGTGCGCGCGATCAAGGAGTTCTTCGGAAACGAGCGCTGTCGAGTTCA 60  
Db 1 TCCGTCCTCGTGTGCGCGCGATCAAGGAGTTCTTCGGAAACGAGCGCTGTCGAGTTCA 60  
Qy 61 TGGACCAAGAACAAACCGCTTTCGGGCTTGACCCACAGCGTCTGTGCGGCTTGGGCC 120  
Db 61 TGGACCAAGAACAAACCGCTTTCGGGCTTGACCCACAGCGTCTGTGCGGCTTGGGCC 120  
Qy 121 CCGGTGCTGACCCGCTGACCGCGCGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180  
Db 121 CCGGTGCTGACCCGCTGACCGCGCGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180  
Qy 181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240  
Db 181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240  
Qy 241 TGTGCGTGTACGCGGGGTCAACCGGTTTCGTTTTCATCGAGCGCTTTACCGGAAGGTCT 300  
Db 241 TTTGCGGTGTACGCGGGGTCAACCGGTTTCGTTTTCATCGAGACGCGTACCGCAAGGTGT 300  
Qy 301 CGGACGAGTGTTCACCGACGACATCCACTACCTGACGCGCGCGAGAGAGACCGCCACG 360  
Db 301 CCGAGGGTGTGTCACCGACGAGATCCACTACCTGACGCGCGCGAGAGAGACCGCCACG 360  
Qy 361 TGGTGGCGCAGGCCAACTCGCGCGTGGACGCCAACCGCGGTTTACCGAGGAGAAGATCC 420  
Db 361 TCGTGGCACAGGCCAACTCGCTGTGGATGCGACGCGGCTTACCGAGGACAAGATCC 420  
Qy 421 TGGTTCGCGCAAGAGCGCGCGAGTGGAGTTCTGTGTCGGCGACCGAGGTGCACTACATGG 480

Db 421 TGGTTCGCGCTAAGGGTGGCGAGTTCGATTCGTCTCGGCGACCGAGGTGCACTACATGG 480  
Qy 481 ATGTTCTCCGCGCGCCAGATGTTGTCGTGCGGACCGCCATGATCCGTTCTTCGAGCACG 540  
Db 481 ACGTCTCGCGCGCCAGATGTTGTCGTGCGGACCGCCATGATCCGTTCTTCGAGCACG 540  
Qy 541 ACGAGCCCAACCGTCCCTCATGTTGTCGCAACATGACGCGCAGCGGTTCGCTGGTGC 600  
Db 541 ACGAGCCCAACCGTCCCTCATGTTGTCGCAACATGACGCGCAGCGGTTCGCTGGTGC 600  
Qy 601 GTAGCGAGGCTCCGCTGCTGCTGCTAC 626  
Db 601 GCAGCGAGGCGCGCTGCTGCTGCTAC 626

## RESULT 15

US-09-285-306-43

; Sequence 43, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 43

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-43

Query Match 91.8%; Score 574.8; DB 9; Length 626;

Best Local Similarity 94.9%; Pred. No. 3.1e-138;

Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGTGCGCGCGATCAAGGAGTTCTTCGGAAACGAGCGCTGTCGAGTTCA 60  
Db 1 TCCGTCCTCGTGTGCGCGCGATCAAGGAGTTCTTCGGAAACGAGCGCTGTCGAGTTCA 60  
Qy 61 TGGACCAAGAACAAACCGCTTTCGGGCTTGACCCACAGCGTCTGTGCGGCTTGGGCC 120  
Db 61 TGGACCAAGAACAAACCGCTTTCGGGCTTGACCCACAGCGTCTGTGCGGCTTGGGCC 120  
Qy 121 CCGGTGCTGACCCGCTGACCGCGCGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180  
Db 121 CCGGTGCTGACCCGCTGACCGCGCGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180  
Qy 181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240  
Db 181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240  
Qy 241 TGTGCGTGTACGCGGGGTCAACCGGTTTCGTTTTCATCGAGCGCTTTACCGGAAGGTCT 300  
Db 241 TTTGCGGTGTACGCGGGGTCAACCGGTTTCGTTTTCATCGAGACGCGTACCGCAAGGTGT 300  
Qy 301 CGGACGAGTGTTCACCGACGACATCCACTACCTGACGCGCGCGAGAGAGACCGCCACG 360  
Db 301 CCGAGGGTGTGTCACCGACGAGATCCACTACCTGACGCGCGCGAGAGAGACCGCCACG 360  
Qy 361 TGGTGGCGCAGGCCAACTCGCGCGTGGACGCCAACCGCGGTTTACCGAGGAGAAGATCC 420  
Db 361 TCGTGGCACAGGCCAACTCGCTGTGGATGCGGACGCGGCTTACCGAGGACAAGATCC 420  
Qy 421 TGGTTCGCGCAAGAGCGCGCGAGTGGAGTTCTGTGTCGGCGACCGAGGTGCACTACATGG 480  
Db 421 TGGTTCGCGCTAAGGGTGGCGAGTTCGATTCGTCTCGGCGACCGAGGTGCACTACATGG 480



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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds  
(without alignments)  
11150.034 Million cell updates/sec

Title: US-09-285-306-3  
Perfect score: 705  
Sequence: 1 cccaggagctggagcgatc.....ggcgatcgagcgagcgatc 705

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA: \*  
1: /cgn2\_6/ptodata/1/ina/5A\_COMB.seq: \*  
2: /cgn2\_6/ptodata/1/ina/5B\_COMB.seq: \*  
3: /cgn2\_6/ptodata/1/ina/6A\_COMB.seq: \*  
4: /cgn2\_6/ptodata/1/ina/6B\_COMB.seq: \*  
5: /cgn2\_6/ptodata/1/ina/PCTUS\_COMB.seq: \*  
6: /cgn2\_6/ptodata/1/ina/backfiles1.seq: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	555	78.7	3447	2	US-08-313-185-57
5	555	78.7	3447	2	US-09-082-614A-57
6	541.4	76.8	970	1	US-08-250-030-1
7	541.4	76.8	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
19	528.8	75.0	620	3	US-08-520-946-137
20	528.8	75.0	620	3	US-08-520-946-139
21	528.8	75.0	620	3	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	454.4	64.5	706	3	US-08-797-812-25
27	409	58.0	5099	4	US-09-887-052-1

28	407.4	57.8	5099	4	US-09-887-052-3	Sequence 3, Appli
29	407.4	57.8	5099	4	US-09-887-052-5	Sequence 5, Appli
30	403.2	57.2	4227	4	US-09-902-540-8919	Sequence 8919, Ap
C 31	403.2	57.2	9367	4	US-09-902-540-951	Sequence 951, App
C 32	367.6	52.1	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	367.6	52.1	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.6	47.9	4083	4	US-09-489-039A-22	Sequence 22, Appl
C 35	337.6	47.9	4206	4	US-09-489-039A-30	Sequence 30, Appl
	295	41.8	432	2	US-08-313-185-59	Sequence 59, Appl
37	295	41.8	432	3	US-09-082-614A-59	Sequence 59, Appl
38	284.6	40.4	324	3	US-08-750-088A-36	Sequence 36, Appl
39	284.6	40.4	324	4	US-09-722-319-36	Sequence 36, Appl
40	263.6	37.4	2964	4	US-09-540-236-1097	Sequence 1097, Ap
41	263.6	37.4	31063	4	US-09-596-002-20	Sequence 20, Appl
42	262.4	37.2	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
43	257.2	36.5	319	3	US-08-750-088A-35	Sequence 35, Appl
44	257.2	36.5	319	4	US-09-722-319-35	Sequence 35, Appl
C 45	249	35.3	11935	4	US-09-634-238-401	Sequence 401, App

#### ALIGNMENTS

RESULT 1

US-08-797-812-24

; Sequence 24, Application US/08797812

; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berro, Anthony J.

; APPLICANT: Stryer, Lubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, 8th Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 706 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;

Best Local Similarity 91.2%; Pred. No. 1.4e-112;

Matches 643; Conservative 3; Mismatches 59; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCTGATCAACATCCGTCCTCGTGGCGG 60  
Db 2 CCCAGAGCTGGAGGCGATCACACGCGAGAGTGTATCAACATCCGCGCGGTGTGGCG 61  
Qy 61 CGATCAAGGAGTTCTTCGGCCACGACCGAGCTGTCCAGTTTCATGACACAGAACCCGC 120  
Db 62 CGATCAAGGAGTTCTTCGGCCACGACCGAGCTGAGCCAAATTCATGACACAGAACCCGC 121  
Qy 121 TGTGGGGCTACCCACAGGCGCCCTGTGCGGCTGGGCGCGGTGTCTGTCCCGG 180  
Db 122 TGTGGGGTTGACCCACAGGCGCCACTGTGCGGCTGGGCGCGGTGTCTGTACGCTG 181  
Qy 181 AGCGGGCGGGTGGAGGTCCGCGAGTGCACCGTCCACTACGGCGGAGTGTGCCGA 240  
Db 182 AGCGTCCGGGTGGAGGTCCGCGAGTGCACCGTCCACTACGGCGGAGTGTGCCGA 241  
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCATCGGCTCGCTGTGCGGTGTACGCGGG 300  
Db 242 TCGAAACCCCTGAGGGCCCAACATCGGTTCATCGGCTCGCTGTGCGGTGTACGCGGG 301  
Qy 301 TCAACCCGTTGCGGTTCATCGAGAGCGCGTACCGCAAGGTGTGACGGCGTGTACCG 360  
Db 302 TCAACCCGTTGCGGTTCATCGAAACCGCGGTACCGCAAGGTGTGACGGCGTGTAGCG 361  
Qy 361 ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGCACGTGTGTGCGCAGGCCAACT 420  
Db 362 ACGAGATCGTACTGACCGCGGACGAGGAGGACCGCACGTGTGTGCGCAGGCCAAAT 421  
Qy 421 CGCCGATCGAGCGGAAGGGCGGGTTCGCGAGGCGCGGTGTCTGTCGCGCGCAAGCGG 480  
Db 422 CGCCGATCGATCGGAGCGGTGCTGTCTGTCGAGCGCGCGGTGTCTGTCGCGCGCAAGCGG 481  
Qy 481 GCGAGTCTGAGTACGTCCTCGTCCGAGGTGGACTACATGACNTKTCSCGCGCCARA 540  
Db 482 GCGAGTGGAGTACGTCCTCGTCTGAGGTGGACTACATGAGCGTCTCGCGCGCCAGA 541  
Qy 541 TGGTCTCGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCGCCAAACGTTGCC 600  
Db 542 TGGTCTCGGTGGCCACCGCGATGATTCCTTCTTGAGCAGCAGCGCCAAACGTTGCC 601  
Qy 601 TGATGGCGCCAAACATGCAKCGCCAGCGGTTCCGCTGTCGCGAGCGAGCGCGCTGG 660  
Db 602 TCATGGGGCAACATGCAKCGCCAGCGGTTCCGCTGTCGCTGTCGAGCGCGCGCTGG 661  
Qy 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGGCGGACGT 705  
Db 662 TGGGACCGGATGAGCTGCGCGCGCGATCGACGGCGGACGT 706

RESULT 2

US-09-103-840A-2

; Sequence 2, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

; APPLICANT: FLEISCHMAN, Robert D.

; APPLICANT: WHITE, Owen R.

; APPLICANT: FRASER, Claire M.

; APPLICANT: VENTER, John C.

; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

; TITLE OF INVENTION: TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00

; CURRENT APPLICATION NUMBER: US/09/103.840A

; CURRENT FILING DATE: 1998-06-24

; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 2

; LENGTH: 4403765

; TYPE: DNA

; ORGANISM: Mycobacterium tuberculosis

; FEATURE:

; OTHER INFORMATION: CDC 1551

; OTHER INFORMATION: "n" bases at various positions throughout the sequence

; OTHER INFORMATION: represent a, t, c or g

US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;

Best Local Similarity 91.0%; Pred. No. 7.8e-111;

Matches 636; Conservative 3; Mismatches 60; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACGCGAGACCTGTATCAACATCCGTCCTCGTGGCGG 60  
Db 762963 CCCAGGACGTGGAGGCGATCACACGCGAGAGTGTATCAACATCCGCGCGGTGTGGCGG 763022  
Qy 61 CGATCAAGGAGTTCTTCGGCCACGACCGAGCTGTCCAGTTTCATGGAACAGAACCCGC 120  
Db 763023 CGATCAAGGAGTTCTTCGGCCACGACCGAGCTGTAGCCAAATTCATGGAACAGAACCCGC 763082  
Qy 121 TGTGGGGCTACCCACAGGCGCCCTGTGCGGCTGGGCGCGGTGTCTGTCCCGG 180  
Db 763083 TGTGGGGTTGACCCACAGGCGCCACTGTGCGGCTGGGCGCGGTGTCTGTACGCTG 763142  
Qy 181 AGCGGGCGGGTGGAGGTCCGCGAGTCCGCGAGTGCACCGTCCACTACGGCGGAGTGTGCCGA 240  
Db 763143 AGCGTCCGGGTGGAGGTCCGCGAGTGCACCGTCCACTACGGCGGAGTGTGCCGA 763202  
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCGATTCGGTTCGCTGTCGGTGTACGCGGG 300  
Db 763203 TCGAAACCCCTGAGGGGCCCAACATCGGTTCGATTCGGTTCGCTGTCGGTGTACGCGGG 763262  
Qy 301 TCAACCCGTTGCGGTTCATCGAGAGCGCGTACCGCAAGGTGTGCGAGCGGTGTGTCACCG 360  
Db 763263 TCAACCCGTTGCGGTTCATCGAAACCGCGGTACCGCAAGGTGTGTCAGCGGTGTGTTAGCG 763322  
Qy 361 ACGAGATCCACTACTGACCGCGCGACGAGGAGGACCGCCACGTGTGTGCGCGAGGCCAACT 420  
Db 763323 ACGAGATCTGTACTGACCGCGCGACGAGGAGGACCGCCACGTGTGTGCGCAGGCCAAAT 763382  
Qy 421 CGCGGATCGACCGCAAGGGCGCGTTCGCGAGGCGCGGTGTGTCGGTTCGCGCGCAAGCGG 480  
Db 763383 CGCGGATCGATCGCGACCGTTCGCTTCGAGCGCGCGGTGTGTCGGTTCGCGCGCAAGCGG 763442  
Qy 481 GCGAGGTCTGAGTACGTGCGCCCTCGTCCGAGGTGGACTACATGGAACNTKTCSCGCGCCARA 540  
Db 763443 GCGAGGTGGAGTACGTGCGCCCTCGTCTGAGGTGGACTACATGGAACNTKTCGCGCGCCAGA 763502  
Qy 541 TGGTCTCGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCGCCAAACGTTGCC 600  
Db 763503 TGGTCTCGGTGGCCACCGCGATGATTCCTTCTTGAGCAGCAGCGCCAAACGTTGCC 763562  
Qy 601 TGATGGCGCCAAACATGCAKCGCCAGCGGTTCCGCTGTCGCTGTCGAGCGAGCGCGCTGG 660  
Db 763563 TCATGGGGCAACATGCAKCGCGCGGTTCGCTGTCGCTGTCGAGCGAGCGCGCGCTGG 763622  
Qy 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGGCGG 699  
Db 763623 TGGGACCGGATGAGCTGCGCGCGCGATCGACGGCGG 763661

RESULT 3

US-09-103-840A-1

; Sequence 1, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37RV
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.0%; Pred. No. 7.8e-111;
Matches 636; Conservative 3; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGAGGCGGATCACACCGCAGACCCCTGATCAACATCGCTCCCGTCTGTGGCGG 60
DB 761003 CCCAGGACGTGAGGCGGATCACACCGCAGACCTTGTCAACATCGCTCCCGTCTGTGGCGG 761062
QY 61 CGATCAAGAGGTTCTTGGCCACACCGCAGCTGTCCAGTTTCATGACCAAGAACACCCGC 120
DB 761063 CGATCAAGAGGTTCTTGGCCACACCGCAGCTGTCCAGTTTCATGACCAAGAACACCCGC 761122
QY 121 TGTGGGGCTCACCCACAGCGCGCCCTGTGCGCGCTGGCGCGGTGTCTGTCCCGGG 180
DB 761123 TGTGGGGGTGTGACCCACAGCGCGGACTGTGCGCGCTGGCGCGGTGTCTGTCCCGGTG 761182
QY 181 AGCGGGCGGGCTGAGGTTCGCGACGTGACCCGTCACCCGTCACCGCGCGGAGTGTCCCGGA 240
DB 761183 AGCGTGGCGGGCTGAGGTTCGCGACGTGACCCGTCACCGTCACCGCGGAGTGTCCCGGA 761242
QY 241 TCGAGACCCCGAGGGTTCACATCGTGTGATCGGTTCGCTGTGCGGTGTACGCGCGGG 300
DB 761243 TCGAAACCCCTGAGGGGGCCAAACATCGTGTGATCGGTTCGCTGTGCGGTGTACGCGCGGG 761302
QY 301 TCAACCCGTTCCGGTTTCATCGAGAGCGCGTACCGCAAGGTGTTCACGCGCGTGTACCGG 360
DB 761303 TCAACCCGTTCCGGTTTCATCGAAACCGCGTACCGCAAGGTGTTCACGCGCGTGTACCGG 761362
QY 361 ACGAGATCCACTTACCTGACCGCGCAGCAGGAGGACCGCCACCTGTGTGGCGAGGCCAACT 420
DB 761363 ACGAGATCGTGTACCTGACCGCGCAGCAGGAGGACCGCCACCTGTGTGGCGAGGCCAACT 761422
QY 421 CGCCGATCGACCGGCAAGGCGCGGTTTCGCGAGGCGCGGTTGTGTTCGCGCGCAAGGCGG 480
DB 761423 CGCCGATCGATCGGACGCGTGTCTGTGAGCGCGCGGTTGTGTTCGCGCGCAAGGCGG 761482
QY 481 GCGAGGTGAGTACGTGCGCTCTGTGAGGTGAGTACATGACATKTCSCCGCGCCARA 540
DB 761483 GCGAGGTGAGTACGTGCGCTCTGTGAGGTGAGTACATGACATKTCSCCGCGCCARA 761542
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGCAGCAGCAGCAGCAGTGC 600
DB 761543 TGGTGTGCGTGGCCACCGCGATGATTCCTTCTGAGCAGCAGCAGCAGCAGCAGTGC 761602
QY 601 TGATGGCGCCAAATGACAKGCCAGGCGGTTTCGCTGTGTGCGCAGCGAGCGCGCTGG 660
DB 761603 TCATGGGGGCAACATGACAGCGCCAGGCGGTTGCGCTGTGTGAGCGCGCGCGCTGG 761662
QY 661 TGGGACCGGCGATGAGCTGTGCGCGCGCGATCGACGCGG 699
DB 761663 TGGGACCGGCGATGAGCTGTGCGCGCGCGATCGACGCGG 761701
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RESULT 4

US-08-313-185-57

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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57
```

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Query Match      78.7%; Score 555; DB 2; Length 3447;
Best Local Similarity 86.7%; Pred. No. 1.7e-101;
Matches 606; Conservative 3; Mismatches 90; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGAGGCGGATCACACCGCAGACCCCTGATCAACATCGTCCCGTCTGTGGCGG 60
DB 1124 CCCAGGACGTGAGGCGGATCACACCGCAGACCGTGTATCAATATCGTCCGCTGTGTGGCGG 1183
QY 61 CGATCAAGAGTCTTTCGGCACACCGCAGCTGTCCAGTTCATGACAGACAGACACCCGC 120
DB 1184 CTATCAAGGAATCTTTCGGCACACCGCAGCTGTGTGAGTTCATGAGTACAGAACCAACCCCTC 1243
QY 121 TGTGGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGGCGCGGCTGTGTCTGTCCCGGG 180
DB 1244 TGTGGGGCTGACCCACAAAGCGCGCTGTGCGCGCTGGGCGCGGCTGTGTCTGTGTGTG 1303
QY 181 AGCGGGCGGGCTGAGGTTCGCGACGTGCAACCGCTCCCACTACGCGCGGATGTGCCCGA 240
DB 1304 AGCGTCCGGGCTAGAGGTTCGCGACGTGCAACCGCTTCGCACTACGCGCGGATGTGCCCGA 1363
QY 241 TCGAGACCCCGGAGGTTCGCAACATCGGTCTGTGATCGGTTCGCTGTGTGTGTGTGTGTGTGT 300
DB 1364 TCGAGACTCCGGAGGCGCGCGCAACATAGGTCTGTGATCGGTTCATTTGTGTGTGTGTGTGTGTGT 1423
QY 301 TCAACCCGTTCCGGTTTCATTCGAGACCGCGTACCGCAAGGTGTGTGACCGCGGTGTGTGTGTGTGT 360
DB 1424 TCAACCCGTTCCGGTTTCATTCGAAACACCGTACCGCAAGGTGTGTGACCGGTGTGTGTGTGTGTGT 1483
```

```
QY 361 ACGAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTCGTGGTGGCGAGGCCAACT 420
Db 1484 ACGAGATCGAATACTTGACCGCTGACGAGGAGGACCGCCATGTCGTGGCGGAGGCCAACT 1543
QY 421 CGCCGATCGAGCGCAAGGGCGGTTCGCGGAGGCCCGGGTGTGTCGCGCGCAAGGGCG 480
Db 1544 CGCCGATCGAGCGCGCGGTTCCTCGAGCGCGGTTCGTGGGTGGCGCGCGCAAGGGCG 1603
QY 481 GCGAGTGCAGTACGTCGCTCGCGAGGTGGAATACATGAGNTKSCCGCGGCCARA 540
Db 1604 GCGAGTGCAGTACGTCGCTCGCGAGGTGGAATACATGAGNTKSCCGCGGCCARA 1663
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGGCC 600
Db 1664 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGGCC 1723
QY 601 TGATGGGCGCCAACTGCAKCGCCAGCGGTTCGCTGGTGGCGAGCGCGCGTGG 660
Db 1724 TGATGGGCGCTAACTGCAKCGCCAGCGGTTCGCTGGTGGCGAGCGCGCGTGG 1783
QY 661 TGGGCACCGGATGAGCTGCGCGCGCGGATCGAGCGG 699
Db 1784 TGGGTACCGGTATGAGTTGCGCGCGCGCATCGAGCGTG 1822
```

## RESULT 5

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US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082.614A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELEPHONE: (202) 408-4000
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
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; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57
```

Query Match 78.7%; Score 555; DB 3; Length 3447;

Best Local Similarity 86.7%; Pred. No. 1.7e-101;  
Matches 606; Conservative 3; Mismatches 90; Indels 0; Gaps 0;

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QY 1 CCCAGGACGTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCCTCCGTCGTGGCGG 60
Db 1124 CCCAGGACGTGGAGGCGATCACACCGAGACCCCTGATCAATATCCGTCCTCCGTCGTGGCGG 1183
QY 61 CGATCAAGGAGTCTTTCGGCAACGAGCAGTGTCCAGTTTCATGGAACAGAACCCCGC 120
Db 1184 CTATCAAGGAAATCTTCGGCAACGAGCAGTGTCCAGTTTCATGGAACAGAACCCCGC 1243
QY 121 TGTGGGGCTCACCAAGCGCGCTGTGGGGCTGGGCCGGGTGCTGTCTCCCGG 180
Db 1244 TGTGGGGCTCACCAAGCGCGCTGTGGGGCTGGGCCGGGTGCTGTCTCCCGG 1303
QY 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCCGTCCTACGCGCGGATGTGCCGA 240
Db 1304 AGCGTGGCGGCTAGAGTCCGTCGACGTGCAACCCCTCGACTACGCGGATGTGCCGA 1363
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATTCGCTCGCTGTGTCGCGGG 300
Db 1364 TCGAGACTCCGGAGGGCCGAAACATAGTCTGATCGGTTCATTTGTCGCTGTGTCGCGGG 1423
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGAAGTGGTTCGACGGCGTGTCCACCG 360
Db 1424 TCAACCCGTTCCGGTTTCATCGAACAACACCGTACCGCAAGTGGTTCGACGGTGTGTCGCGG 1483
QY 361 ACAGATCCACTACTCTGACCGCGCAGCAGGAGGACCGCCAGTGTGGCGGAGCCAACT 420
Db 1484 ACAGATCGAATACTTTCACCGCTGACGAGGAGACCGCCATGTCTGGCGGAGGCCAACT 1543
QY 421 CGCGATCGACGCGCAAGGGCGGTTCGCGAGGCCCGGGTCTGCTCGCGCGCAAGCGG 480
Db 1544 CGCGATCGACGAGGCGCGCGTTCCTCGAGCGCGCGTGTGGGTGTCGCGCGCAAGCGG 1603
QY 481 GCGAGTTCGAGTACGTGCTCCCTCGAGGTGGATACATGACNTKSCCGCGCCARA 540
Db 1604 GCGAGTTCGAGTACGTGCTCCCTCGAGGTGGATACATGAGTGTCTCGCGCACGCCAGA 1663
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGGCC 600
Db 1664 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGGCC 1723
QY 601 TGATGGGCGCCAACTGCAKCGCCAGCGGTTCGCTGGTGGCGAGCGCGCGTGG 660
Db 1724 TGATGGGCGCTAACTGCAKCGCCAGCGGTTCGCTGGTGGCGAGCGCGCGTGG 1783
QY 661 TGGGCACCGGATGAGCTGCGCGCGCGGATCGAGCGG 699
Db 1784 TGGGTACCGGTATGAGTTGCGCGCGCGCATCGAGCGTG 1822
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## RESULT 6

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US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
```

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;
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-3061
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-250-030-1

Query Match 76.8%; Score 541.4; DB 1; Length 970;
Best Local Similarity 90.8%; Pred. No. 7.9e-99;
Matches 572; Conservative 3; Mismatches 55; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGCGATCACACCGCAGACCTGATCAACATCCGTCGCGTGGCGG 60
DB 341 CCCAGAGCTGGAGCGATCACACCGCAGACCTGATCAACATCCGCGCGTGGCGG 400

QY 61 CGATCAAGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAAGCAACCCGC 120
DB 401 CGATCAAGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAAGCAACCCGC 460

QY 121 TGTGGGGTTCACCAACAGCCGCTGTGCGCGCTGGCCCGGGTGTCTGTCCCGG 180
DB 461 TGTGGGGTTCACCAACAGCCGCTGTGCGCGCTGGCCCGGGTGTCTGTCCCGG 520

QY 181 AGCGGGCGGGTGGAGTCCCGGAGCTGACCGCTCCACTACCGCGGATGTCGCGA 240
DB 521 AGCGTCCGGGTGGAGGAGCGGAGTCCCGCTCCACTACCGCGGATGTCGCGA 580

QY 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGCTGTGCGGTGACGCGCGG 300
DB 581 TCGAACCCTCGAGGGCCCAACATCGTCTGATCGGCTCGCTGTGCGGTGACGCGCGG 640

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCCTA CCGCAAGGTGTGCAAGCGGTGTCACG 360
DB 641 TCAACCCGTTCCGGTTTCATCGAAGCGCTGACGCAAGGTGTGCAAGCGGTGTCACG 700

QY 361 ACGAGTCCACTACCTGACCGCGGAGGAGGACCGCACGCTGTGGTGGCGAGGCAACT 420
DB 701 ACGAGTCCACTACCTGACCGCGGAGGAGGACCGCACGCTGTGGTGGCGAGGCAACT 760

QY 421 CGCCGATCGACGCGGAGGCGGTTCCGCGAGCGCGGCTGTGCTCGCCCGCAAGGCGG 480
DB 761 CGCCGATCGATCGGAGCGGTCTGCTCGTACGCGCGGCTGTGCTCGCCCGCAAGGCGG 820

QY 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATTACATGAACNTKSCCGCGCCARA 540
DB 821 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATTACATGAACNTKSCCGCGCCARA 880

QY 541 TGGTGTCCGTGGCCACCGGATGATCCCGTTCTCGAGCAACGACCGCAACCGTGGCC 600
DB 881 TGGTGTCCGTGGCCACCGGATGATCCCGTTCTCGAGCAACGACCGCAACCGTGGCC 940

QY 601 TGATGGGCGCCAAATGCAKCCCGAGCGG 630
DB 941 TCATGGGCGCCAAATGCAKCCCGAGCGG 970
```

```

RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; PCT-US95-06790-1

Query Match 76.8%; Score 541.4; DB 5; Length 970;
Best Local Similarity 90.8%; Pred. No. 7.9e-99;
Matches 572; Conservative 3; Mismatches 55; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGCGATCACACCGCAGACCTGATCAACATCCGTCGCGTGGCGG 60
DB 341 CCCAGAGCTGGAGCGATCACACCGCAGACCTGATCAACATCCGCGCGTGGCGG 400

QY 61 CGATCAAGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAAGCAACCCGC 120
DB 401 CGATCAAGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAAGCAACCCGC 460

QY 121 TGTGGGGTTCACCAACAGCCGCTGTGCGCGCTGGCCCGGGTGTCTGTCCCGG 180
DB 461 TGTGGGGTTCACCAACAGCCGCTGTGCGCGCTGGCCCGGGTGTCTGTCCCGG 520

QY 181 AGCGGGCGGGTGGAGTCCCGGAGCTGACCGCTCCACTACCGCGGATGTCGCGA 240
DB 521 AGCGTCCGGGTGGAGGAGCGGAGTCCCGCTCCACTACCGCGGATGTCGCGA 580

QY 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGCTGTGCGGTGACGCGCGG 300
DB 581 TCGAACCCTCGAGGGCCCAACATCGTCTGATCGGCTCGCTGTGCGGTGACGCGCGG 640

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCCTA CCGCAAGGTGTGCAAGCGGTGTCACG 360
DB 641 TCAACCCGTTCCGGTTTCATCGAAGCGCTGACGCAAGGTGTGCAAGCGGTGTCACG 700

QY 361 ACGAGTCCACTACCTGACCGCGGAGGAGGACCGCACGCTGTGGTGGCGAGGCAACT 420
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Db 701 ACGAGATCGTGTACTGACCGCGGACGAGAGGAGCCGCAACGTGGTGCAACAGGCCAATT 760
Qy 421 CGCCGATCGAGCGGAAGGCGCGGTTCGCCGAGGCGCGGGTGTGTCGCCGCGCAAGGCGG 480
Db 761 CGCCGATCGATGCGGACGGTTCGTCGAGCGCGGCTGCTGGTCCGCCGCAAGGCGG 820
Qy 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGAATACATGAANWTKSCCGCGCCARA 540
Db 821 GCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAATACATGAAGTCTCGCGCCGCGAGA 880
Qy 541 TGGTGTGGTGGCGCACCGCGATGATCCCGTTCTTCGACGACGACGACGACGACGACGACG 600
Db 881 TGGTGTGGTGGCGCACCGCGATGATTCCTTCCTGGAGCAGCAGCAGCAGCAGCAGCAGC 940
Qy 601 TGATGGGCGCCAAACATGCAKCCAGCGG 630
Db 941 TCATGGGCGCAACATGCAKCCAGCGG 970

RESULT 8
US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 90.5%; Pred. No. 1.2e-96;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCCGTCGTCGCGCGATCAAGAGTTCTTCGCGACAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGGTCCGCGCATCAAGAGTTCTTCGCGACAGCCAGCTGAGC 60
Qy 96 CAGTTTCATGGACCAAGAACCCGTCGCGGGCTCACCCACAGCGCGCTCTCGCG 155
Db 61 CAATTTCATGGACCAAGAACCCGTCGCGGGTTGACCCCAAGCGCGCTGTCCGCG 120
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Qy 156 CTGGCCCGGGTGTGTTCTGTCCTCCGCGAGCGGGCTGGAGGTCCGCGAGCTGCACCCG 215
Db 121 CTGGGCGCCGCGGTCTGTCAAGTGTAGCGTCCGGGCTGGAGGTCCGCGAGCTGCACCCG 180
Qy 216 TCCACATACGGCGGATGTGCCCGATCAGAACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 240
Qy 276 GGCTCGCTGTGCGGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAGAGCCCTACCGC 335
Db 241 GGCTCGCTGTGCGGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACCCCTACCGC 300
Qy 336 AAGTGTGTGACGCGGTGGTCAACCGAGATCCATCTACCTGACCGCGCGAGAGGAG 395
Db 301 AAGTGTGTGACGCGGTGGTCAACCGAGATCCATCTGACCGCGCGAGAGGAG 360
Qy 396 CGCCACGTGTGGCGCAGGCGCACTCGCCGATCGAGCGGCAAGGGCCGGTTCGCCGAGGCC 455
Db 361 CGCCACGTGTGGCGCAGGCGCACTTCGCCGATCGATCGGACGGTTCGTCGAGCGG 420
Qy 456 CGGTGTGTGTCGCGCGCAAGGCGGAGGTGAGTACGTCCTCGTCCGAGGTGAGC 515
Db 421 CGGTGTGTGTCGCGCGCAAGGCGGAGGTGAGTACGTCCTCGTCCGAGGTGAGC 480
Qy 516 TACATGGACNTKTCSCCGCGCCARATGTTGTCGGTGGCCACCGCGATGATCCCTTCCTC 575
Db 481 TACATGGACNTKTCSCCGCGCCARATGTTGTCGGTGGCCACCGCGATGATTCCTTCCTG 540
Qy 576 GAGCACGACGACCAACCGTGCCTGATGGCGCCAAACATGKACGCCAGCGGTTCGG 635
Db 541 GAGCACGACGACCAACCGTGCCTGATGGCGCCAAACATGKACGCCAGCGGTTCGG 600
Qy 636 CTGGTGGCGACGCGANGCGCC 655
Db 601 CTGGTGGCGACGCGANGCGCC 620

RESULT 9
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
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; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 90.5%; Pred. No. 1.2e-96;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTGTCGCGGATCAAGGAGTTCTTCGGCACAGCCAGCTGTCC 95
Db 620 ATCAACATCCGTCCTGTCGCGGATCAAGGAGTTCTTCGGCACAGCCAGCTGTAGC 561

QY 96 CAGTTTCATGACAGCAACACCGCTGTCTGGGGCTCACCCAAAGCGCGCTGTCTGGCG 155
Db 560 CAATTTCATGACAGCAACACCGCTGTCTGGGGTTGACCCAAAGCGCGCTGTCTGGCG 501

QY 156 CTGGGCGCGGCTGTCTGTCCGGAGCGGGCGGGCTGGAGTCCGGACGTCGACCCG 215
Db 500 CTGGGCGCGGCGTGTCTGTCACTGAGCGTGTCTGGGGCTGGAGTCCGGACGTCGACCCG 441

QY 216 TCCCACTAGCGCGGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
Db 440 TCCCACTAGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381

QY 276 GCGTCGCTGTCTGTCTGTCGCGGGTCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGC 335
Db 380 GCGTCGCTGTCTGTCTGTCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGC 321

QY 336 AAGTGTGTCTGACGCGGTGTACCGAGATCCACTACTGATCCAGCGCGCGAGAGGAC 395
Db 320 AAGTGTGTCTGACGCGGTGTGTAGCGACGAGATCGTGTACCTGACCGCGGACGAGAGGAC 261

QY 396 GCGCAGCTGTGGCGAGCCAACTCGCGGATCGAGCGGCAAGGGCGGTTCCCGAGGCC 455
Db 260 GCGCAGCTGTGGCGAGCCAACTCGCGGATCGAGCGGCAAGGGCGGTTTCGTCGAGCGG 201

QY 456 CGGTCGCTGTCTGCGCGGAGCGGAGTCTGAGTACGTCCTCTGTCGAGGTGGAC 515
Db 200 CGGTCGCTGTCTGCGCGGAGCGGAGTCTGAGTACGTCCTCTGTCGAGGTGGAC 141

QY 516 TACATGACATKTCSCGCGCCARATGTGTCTGGTGGCCACCGGATGATCCCGTTCTC 575
Db 140 TACATGACATKTCSCGCGCCAGATGTGTCTGGTGGCCACCGGATGATTCCTTCTCTG 81

QY 576 GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGCCCAACATGCAKCGCCAGCGGTTCCG 635
Db 80 GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGCCCAACATGCAKCGCCAGCGGTTCCG 21

QY 636 CTGGTCCGACGCGGANGCGCC 655
Db 20 CTGGTCCGACGCGGANGCGCC 1

RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```



```
Db      601 CTGTCCTAGCGAGGCCCC 620

RESULT 11
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 90.5%; Pred. No. 1.2e-96;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCCTCGTCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db      620 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 561

Qy      96 CAGTTATGACCAAGAACCCGCTGTCCGGGCTCACCCACAGCGCGCTGTCCGCG 155
Db      560 CAATTATGACCAAGAACCCGCTGTCCGGGTTGACCCACAGCGCGACTGTCCGCG 501

Qy      156 CTGGGCCCGGTGTCTGTCTCCGGAGCGCGCGGTGGAGGTCCGGACGTGCACCCG 215
Db      500 CTGGGGCCCGCGGTCTGTCTACGTGAGCGTCCGGGCTGGAGGTCCGGACGTGCACCCG 441

Qy      216 TCCCACTACGCCGATGTGCCGATCAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
Db      440 TCGCACTACGCCGATGTGCCGATCAGAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

Qy      276 GGCTCGCTGTTCGGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACCCGTCACGC 335
Db      380 GGCTCGCTGTTCGGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACCCGTCACGC 321

Qy      336 AAGTGTGTACGCGGTGTTCACCGACGAGATCCACTACCTGACCGCGACGAGGAGAC 395
Db      320 AAGTGTGTACGCGGTGTGTAGCGACGAGATCGTGTACCTGACCGCGACGAGGAGAC 261

Qy      396 CGCCACGTGTGTGGCGCAGGCCAACTCGCCGATCGACGGCAAGGCCCGGTTTCGCCGAGGCC 455
Db      260 CGCCACGTGTGTGGCACAGGCCAATTCCGCCGATCGATCGGACGCTCGCTTCGTGAGCGG 201

Qy      456 CGGTGTGTGTTCGCCCGCAAGCGCGGAGGTCCAGTACGTGCCCTCGTCCGAGGTGAC 515
Db      200 CGCGTGTGTGTTCGCCCGCAAGCGCGGAGGTACGTGCCCTCGTCTGAGGTGAC 141

Qy      516 TACATGACNTKTCSCCGCGCCARATGTTGTCGTGGCGCCACCGGATGATCCCGTTCCTC 575
Db      140 TACATGACGCTCTCGCCCGCCAGATGTTGTCGTGGCCACCGGATGATTCCTTCCTG 81

Qy      576 GAGCACGACGACCAACCGTGCCCTGATGGCGCCCAACATGCAKCGCCAGCGGTTCCG 635
Db      80 GAGCACGACGACCAACCGTGCCCTCATGGGGCAACATGACAGCGCCAGCGGTGCGG 21

Qy      636 CTGTGCGCAGCGANGCGCC 655
Db      20 CTGTGCGTAGCGAGGCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 90.5%; Pred. No. 1.2e-96;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCCTCGTCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db      1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 60
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QY 96 CAGTTTCATGACAGACAAACCGCTGTCTGGGGCTCACCCACAAAGCGCGCTGTCTGGCG 155  
Db 61 CAATTTCATGACAGACAAACCGCTGTCTGGGGTTGACCCACAAAGCGCGCTGTCTGGCG 120  
QY 156 CTGGGCGCGGGTGTCTGTCTGGGAGCGCGCGGGCTGGAGTCCGGACGCTGCACCG 215  
Db 121 CTGGGCGCGGGTGTCTGTCTGGGAGCGCGCGGGCTGGAGTCCGGACGCTGCACCG 180  
QY 216 TCCCACTACGCGCGGATGTCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
Db 181 TCCCACTACGCGCGGATGTCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 240  
QY 276 GCGTCGCTGTCTGGTACGCGCGGGTCAACCGGTTTGGGTTTATCGAGACCGCTACCGC 335  
Db 241 GCGTCGCTGTCTGGTACGCGCGGGTCAACCGGTTTGGGTTTATCGAGACCGCTACCGC 300  
QY 336 AAGGTGGTTCGACGCGGTGTCTACCGACGAGATCCACTACTGACCGCGCGACGAGGAGAC 395  
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QY 396 CCGCACTGGTGGCGAGGCCAACTCGCGATCGACGCGCAAGGGCGGGTTCGCCAGGCC 455  
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Db 421 CCGGTGCTGTCGCGCGCAAGCGCGGGCGAGGTCTGAGTACGTGCGCTCTGTCGAGTGGAC 480  
QY 516 TACATGGACNTKTCSCGCGCGCARATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCTCTC 575  
Db 481 TACATGGACNTKTCSCGCGCGCARATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCTCTC 540  
QY 576 GAGCAGCAGCAGCCCAACCGTCTGATGGCGCCAAACATCAKCGCCAGCGGTTCCG 635  
Db 541 GAGCAGCAGCAGCCCAACCGTCTGATGGCGCCAAACATCAKCGCCAGCGGTTCCG 600  
QY 636 CTGGTGGCAGCGGCGGCC 655  
Db 601 CTGGTGGTACGAGGCGCCC 620

RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match

Best Local Similarity 75.2%; Score 530.4; DB 4; Length 620;

Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCCGTCCGTCGCGCGATCAAGGAGTTCTTCGGCACCAAGCCAGCTGTCTCC 95  
Db 620 ATCAACATCCCGTCCGTCGCGCGATCAAGGAGTTCTTCGGCACCAAGCCAGCTGTCTCC 561  
QY 96 CAGTTTCATGACAGAACAAACCGCTGTCTGGGGTCTACCCACAAGCGCGCTGTCTGGCG 155  
Db 560 CAATTTCATGACAGAACAAACCGCTGTCTGGGGTCTACCCACAAGCGCGCTGTCTGGCG 501  
QY 156 CTGGGCGCGGGTGTCTGTCTCCGGGAGCGCGGGCTGGAGGTCCGCGACGTGCACCGC 215  
Db 500 CTGGGCGCGGGTGTCTGTCTACGTAGCGTCTCCGGGCTGGAGGTCCGCGACGTGCACCGC 441  
QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
Db 440 TCGCACTACGCGCGGATGTGCCGATCGAAGCCCTGAGGGGCCCAACATCGGTCTGATC 381  
QY 276 GCGTCGCTGTCTGGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGC 335  
Db 380 GCGTCGCTGTCTGGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAGCCGCTACCGC 321  
QY 336 AAGGTGTCTGACGCGGTGTCAACGATCGAGATCCACTTACCTGACCGCGCGACGAGGAGAC 395  
Db 320 AAGGTGTCTGACGCGGTGTGAGCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGAC 261  
QY 396 CGCCACGCGTGGCGCGAGGCCAACTCGCCGATCGACGCGCAAGGGCGGTTCCGCCAGGCC 455  
Db 260 CGCCACGCGTGGCGCGAGGCCAACTCGCCGATCGATCGGACGCGTCTGTCGAGCGC 201  
QY 456 CCGGTGTCTGTCTCCGCGCAAGCGCGGCGAGGTACGATACGTGCGCCCTCGTCGAGGTGGAC 515  
Db 200 CCGGTGTCTGTCTCCGCGCAAGCGCGGCGAGGTACGATACGTGCGCCCTCGTCGAGGTGGAC 141  
QY 516 TACATGGACNTKTCSCGCGCGCARATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCTCTC 575  
Db 140 TACATGGACNTKTCSCGCGCGCARATGGTGTCTGGTGGCCACCGCGATGATTCCTTCTCTG 81  
QY 576 GAGCAGCAGCAGCCCAACCGTCCCTGATGGCGCCAAACATGCAKCGCCAGCGGTTCCG 635  
Db 80 GAGCAGCAGCAGCCCAACCGTCCCTGATGGCGCCAAACATGCAKCGCCAGCGGTTCCG 21  
QY 636 CTGGTGGCAGCGGCGGCC 655  
Db 20 CTGGTGGTACGAGGCGCCC 1

RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

[illegible]

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Db      301  AAGGTGGTCGACGGCGTGTCTAGCGACGAGATCGTGTACCTGACCGCGCGACGAGAGGAC  360
Qy      396  CGCCACGTGGTGGCGGCGAGGCCAACTCGCCGATCGACGGCAAGGGCGCGGTTGCGCGAGGCC  455
Db      361  CGCCACGTGGTGGCAAGGCCCAATTGCGCGATCGATGCGGACGGTTCGCTTCGTCGAGCCG  420
Qy      456  CGGGTGTGTCGTCGCGCGCAAGCGGCGGAGGTGAGTACGTGCGCCCTCGTCCGAGGTGGAC  515
Db      421  CGCGTGTGTCGTCGCGCGCAAGCGGCGGAGGTGGAGTACGTGCGCCCTCGTCTGAGGTGGAC  480
Qy      516  TACATGGAGNTKTCSCCGCGCCARATGTTGTCGGTGGCCACCGCGATGATCCCGTTCCTC  575
Db      481  TACATGGAGCTCTCGCCCGCCGAGATGGTGTGCGTGGCCACCGCGATGATCCCTTCCTG  540
Qy      576  GAGCAGCAGCGCGCAACCGTCCCTGATGGGCGCAACATGCAKCGCGCGCGGTTCGG  635
Db      541  GAGCAGCAGCAGCGCAACCGTCCCTCATGGGGGCAACATGCAKCGCGCGCGGTTCGG  600
Qy      636  CTGGTCCGCGCGANGCGCC  655
Db      601  CTGGTCCGTAGCGAGGCCCC  620

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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds  
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Title: US-09-285-306-3

Perfect score: 705

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Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 3271544945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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2	695	98.6	705	US-09-285-306-4
3	695	98.6	705	US-09-285-306-5
4	695	98.6	705	US-09-285-306-6
5	695	98.6	705	US-09-285-306-7
6	695	98.6	705	US-09-285-306-8
7	695	98.6	705	US-09-285-306-9

8	695	98.6	705	9	US-09-285-306-12	Sequence 12, Appl
9	695	98.6	705	9	US-09-285-306-13	Sequence 13, Appl
10	695	98.6	705	9	US-09-285-306-14	Sequence 14, Appl
11	695	98.6	705	9	US-09-285-306-16	Sequence 16, Appl
12	695	98.6	705	9	US-09-285-306-17	Sequence 17, Appl
13	695	98.6	705	9	US-09-285-306-24	Sequence 24, Appl
14	693	98.3	705	9	US-09-285-306-11	Sequence 11, Appl
15	683	96.9	705	9	US-09-285-306-10	Sequence 10, Appl
16	681	96.6	3444	17	US-10-282-122A-25737	Sequence 25737, A
17	677	96.0	687	9	US-09-285-306-18	Sequence 18, Appl
18	677	96.0	687	9	US-09-285-306-19	Sequence 19, Appl
19	677	96.0	687	9	US-09-285-306-20	Sequence 20, Appl
20	677	96.0	687	9	US-09-285-306-21	Sequence 21, Appl
21	677	96.0	687	9	US-09-285-306-22	Sequence 22, Appl
22	677	96.0	687	9	US-09-285-306-23	Sequence 23, Appl
23	677	96.0	687	9	US-09-285-306-25	Sequence 25, Appl
24	677	96.0	687	9	US-09-285-306-27	Sequence 27, Appl
25	656.6	93.1	705	9	US-09-285-306-143	Sequence 143, App
26	655	92.9	705	9	US-09-285-306-144	Sequence 144, App
27	651.8	92.5	705	9	US-09-285-306-87	Sequence 87, Appl
28	651.8	92.5	705	9	US-09-285-306-88	Sequence 88, Appl
29	651.8	92.5	705	9	US-09-285-306-90	Sequence 90, Appl
30	651.8	92.5	705	9	US-09-285-306-92	Sequence 92, Appl
31	651.8	92.5	705	9	US-09-285-306-96	Sequence 96, Appl
32	651.8	92.5	705	9	US-09-285-306-181	Sequence 181, App
33	650.6	92.3	705	9	US-09-285-306-84	Sequence 84, Appl
34	650.6	92.3	705	9	US-09-285-306-86	Sequence 86, Appl
35	650.6	92.3	705	9	US-09-285-306-93	Sequence 93, Appl
36	650.6	92.3	705	9	US-09-285-306-94	Sequence 94, Appl
37	650.6	92.3	705	9	US-09-285-306-95	Sequence 95, Appl
38	649	92.1	705	9	US-09-285-306-85	Sequence 85, Appl
39	649	92.1	705	9	US-09-285-306-89	Sequence 89, Appl
40	649	92.1	705	9	US-09-285-306-91	Sequence 91, Appl
41	638.6	90.6	687	9	US-09-285-306-146	Sequence 146, App
42	638.6	90.6	687	9	US-09-285-306-148	Sequence 148, App
43	634.6	90.0	705	9	US-09-285-306-75	Sequence 75, Appl
44	633.8	89.9	687	9	US-09-285-306-100	Sequence 100, App
45	632.2	89.7	687	9	US-09-285-306-99	Sequence 99, Appl

#### ALIGNMENTS

RESULT 1  
US-09-285-306-3  
; Sequence 3, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Afymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285.306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 3  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
; FEATURE:  
; NAME/KEY: modified base  
; LOCATION: (525)...(525)  
; OTHER INFORMATION: n = g,a,c or t  
; FEATURE:  
; NAME/KEY: modified base  
; LOCATION: (650)...(650)  
; OTHER INFORMATION: n = g,a,c or t  
US-09-285-306-3

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Query Match      99.5%; Score 701.4; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 7.9e-155;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCCGTCGTTGGGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCCGTCGTTGGGG 60

Qy 61 CGATCAAGGAGTTCTTCCGGCACCGACAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCCGGCACCGACAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGGCTCGGGCCGGTGGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGGCTCGGGCCGGTGGTCTGTCCGGG 180

Qy 181 AGCGGGCCGGGCTGAGGTCCGGACGCTGCAACCGTCCCACTACGGCCGGATGTCCCGA 240
Db 181 AGCGGGCCGGGCTGAGGTCCGGACGCTGCAACCGTCCCACTACGGCCGGATGTCCCGA 240

Qy 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCCGTTACGGCGGG 300
Db 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCCGTTACGGCGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGGTCACCG 360

Qy 361 ACGAGATCACTACTGACCGCGGACGAGGAGCCGCACTGATGAGGAGGAGGAGGAGG 420
Db 361 ACGAGATCACTACTGACCGCGGACGAGGAGCCGCACTGATGAGGAGGAGGAGGAGG 420

Qy 421 CGCCGATCGACGGCAAGGCGCGTTCCGCGAGGCGCGGTCGTCCGCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGGCAAGGCGCGTTCCGCGAGGCGCGGTCGTCCGCGCGCAAGGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCGCTCTGTCGAGGTGGACTACATGAGACNTKTCSCCGGCCARA 540
Db 481 GCGAGGTCGAGTACGTGCGCTCTGTCGAGGTGGACTACATGAGACNTKTCSCCGGCCARA 540

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600

Qy 601 TGATGGGCGCCAAATGCAKCGCCAGCGGTTCCGCTGTCGAGCAGCAGCGCCGCTGG 660
Db 601 TGATGGGCGCCAAATGCAKCGCCAGCGGTTCCGCTGTCGAGCAGCAGCGCCGCTGG 660

Qy 661 TGGGCACCGGATGAGGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGGATGAGGCTGCGCGCGCGATCGACGCGGCGACGT 705
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## RESULT 2

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US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium

RESULT 3
US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
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; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5

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Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGACCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCCCGTCGTGGCGG 60
Db 1 CCCAGACCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCCCGTCGTGGCGG 60
Qy 61 CGATCAAGAGGTTCTTCGGCACCGACGCTGCCAGTTTCATGACACGACACACACCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACCGACGCTGCCAGTTTCATGACACGACACACACCGC 120
Qy 121 TGTGGGGGCTACCCACAAAGCGCCCTGTTCGGCGCTGGGCGCGGTCGTCTGTCCCGGG 180
Db 121 TGTGGGGGCTACCCACAAAGCGCCCTGTTCGGCGCTGGGCGCGGTCGTCTGTCCCGGG 180
Qy 181 AGCGGGCCGGGCTGGAGGTCGCGAGGTGCACCGTCCCACTACCGGCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGGCTGGAGGTCGCGAGGTGCACCGTCCCACTACCGGCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
Qy 301 TCAACCCGTTCCGGGTTTCAGAGAGCGCGTACCGCAAGGTGTTCGACGCGGTGTCACCG 360
Db 301 TCAACCCGTTCCGGGTTTCAGAGAGCGCGTACCGCAAGGTGTTCGACGCGGTGTCACCG 360
Qy 361 ACGAGATCCACTACTCTGACCCGCGAGGAGGACCGCACGTCGTGTGCGCAGGCGCAACT 420
Db 361 ACGAGATCCACTACTCTGACCCGCGAGGAGGACCGCACGTCGTGTGCGCAGGCGCAACT 420
Qy 421 CGCCGATCGACGCGCAAGGGCCGGTTTCGCCGAGGCGCGGTCGTGTCGCCGCAAGGCGG 480
Db 421 CGCCGATCGACGCGCAAGGGCCGGTTTCGCCGAGGCGCGGTCGTGTCGCCGCAAGGCGG 480
Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGACNTKTCSCCGGCCCARA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGACNTKTCSCCGGCCCARA 540
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600
Qy 601 TGATGGGCGCCAAACATGACGCGGCGGTCGCGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
Db 601 TGATGGGCGCCAAACATGACGCGGCGGTCGCGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
Qy 661 TGGGCAACCGGATGGAGCTGCGCGGCGGATCGACGCGGCGACGT 705
Db 661 TGGGCAACCGGATGGAGCTGCGCGGCGGATCGACGCGGCGACGT 705

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RESULT 4
US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

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; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

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Db 1 CCCAGACCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCCCGTCGTGGCGG 60
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Db 121 TGTGGGGGCTACCCACAAAGCGCCCTGTTCGGCGCTGGGCGCGGTCGTCTGTCCCGGG 180
Qy 181 AGCGGGCCGGGCTGGAGGTCGCGAGGTGCACCGTCCCACTACCGGCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGGCTGGAGGTCGCGAGGTGCACCGTCCCACTACCGGCGGATGTGCCCGA 240
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Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
Qy 301 TCAACCCGTTCCGGGTTTCAGAGAGCGCGTACCGCAAGGTGTTCGACGCGGTGTCACCG 360
Db 301 TCAACCCGTTCCGGGTTTCAGAGAGCGCGTACCGCAAGGTGTTCGACGCGGTGTCACCG 360
Qy 361 ACGAGATCCACTACTCTGACCCGCGAGGAGGACCGCACGTCGTGTGCGCAGGCGCAACT 420
Db 361 ACGAGATCCACTACTCTGACCCGCGAGGAGGACCGCACGTCGTGTGCGCAGGCGCAACT 420
Qy 421 CGCCGATCGACGCGCAAGGGCCGGTTTCGCCGAGGCGCGGTCGTGTCGCCGCAAGGCGG 480
Db 421 CGCCGATCGACGCGCAAGGGCCGGTTTCGCCGAGGCGCGGTCGTGTCGCCGCAAGGCGG 480
Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGACNTKTCSCCGGCCCARA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGACNTKTCSCCGGCCCARA 540
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600
Qy 601 TGATGGGCGCCAAACATGACGCGGCGGTCGCGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
Db 601 TGATGGGCGCCAAACATGACGCGGCGGTCGCGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
Qy 661 TGGGCAACCGGATGGAGCTGCGCGGCGGATCGACGCGGCGACGT 705
Db 661 TGGGCAACCGGATGGAGCTGCGCGGCGGATCGACGCGGCGACGT 705

```

```

RESULT 5
US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03

```

```
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACCGCAGCTGTCCAGTTTCATGGACAGAACCCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACCGCAGCTGTCCAGTTTCATGGACAGAACCCCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGGCCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGGCCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGCTGGAGTTCGGACGTCCGACCGCTGCAACCCGTCCTACGCGCGGATGCCCCGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGGACGTCCGACCGCTGCAACCCGTCCTACGCGCGGATGCCCCGA 240
QY 241 TCGAGACCCCGGAGGTCCTGATCCGTCGTGATCGGCTCGCTGCGTGTGATGCGGGG 300
Db 241 TCGAGACCCCGGAGGTCCTGATCCGTCGTGATCGGCTCGCTGCGTGTGATGCGGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGCAGCGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGCAGCGCGTGTACCG 360
QY 361 ACGAGATCCACTACCTGACCGCGCAGCAGGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGCAGGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420
QY 421 CGCGATCGACGCGCAAGGGCGGTTCCCGCAGGCGCGGTCGTGGTCCGCGCAAGGCGG 480
Db 421 CGCGATCGACGCGCAAGGGCGGTTCCCGCAGGCGCGGTCGTGGTCCGCGCAAGGCGG 480
QY 481 GCGAGGTCCAGTACGTGCTCGTCCGAGGTGGACTACATGGACNTKTCSCCGGCCARA 540
Db 481 GCGAGGTCCAGTACGTGCTCGTCCGAGGTGGACTACATGGACNTKTCSCCGGCCARA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCAACTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCAACTGCCC 600
QY 601 TGATGGCGCCCAACATGCAKCGCCGCTTCGCTGGTTCGCGAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGCAKCGCCGCTTCGCTGGTTCGCGAGCGAGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGTTCGCGCGCGCATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGTTCGCGCGCGCATCGACGCGGCGACGT 705

RESULT 6
US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02

; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACCGCAGCTGTCCAGTTTCATGGACAGAACCCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACCGCAGCTGTCCAGTTTCATGGACAGAACCCCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGGCCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGGCCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGCTGGAGTTCGGACGTCCGACCGCTGCAACCCGTCCTACGCGCGGATGCCCCGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGGACGTCCGACCGCTGCAACCCGTCCTACGCGCGGATGCCCCGA 240
QY 241 TCGAGACCCCGGAGGTCCTGATCCGTCGTGATCGGCTCGCTGCGTGTGATGCGGGG 300
Db 241 TCGAGACCCCGGAGGTCCTGATCCGTCGTGATCGGCTCGCTGCGTGTGATGCGGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGCAGCGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGCAGCGCGTGTACCG 360
QY 361 ACGAGATCCACTACCTGACCGCGCAGCAGGAGGACCGCCACGTCGTGGTCGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGCAGGAGGACCGCCACGTCGTGGTCGCGCAGGCCAACT 420
QY 421 CGCGATCGACGCGCAAGGGCGGTTCCCGCAGGCGCGGTCGTGGTCCGCGCAAGGCGG 480
Db 421 CGCGATCGACGCGCAAGGGCGGTTCCCGCAGGCGCGGTCGTGGTCCGCGCAAGGCGG 480
QY 481 GCGAGGTCCAGTACGTGCTCGTCCGAGGTGGACTACATGGACNTKTCSCCGGCCARA 540
Db 481 GCGAGGTCCAGTACGTGCTCGTCCGAGGTGGACTACATGGACNTKTCSCCGGCCARA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCAACTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCAACTGCCC 600
QY 601 TGATGGCGCCCAACATGCAKCGCCGCTTCGCTGGTTCGCGAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGCAKCGCCGCTTCGCTGGTTCGCGAGCGAGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGTTCGCGCGCGCATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGTTCGCGCGCGCATCGACGCGGCGACGT 705

RESULT 7
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09285306A
; CURRENT FILING DATE: 1999-04-02
```



Query Match	98.6%	Score 695	DB 9	Length 705
Best Local Similarity	98.6%	Pred. No. 2.5e-153		
Matches 695	Conservative 4	Mismatches 0	Indels 0	Gaps 0
Qy	1	CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCTCGTCCGTGTCGGCGG	60	
Db	1	CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCAGTCTGTCGGCGG	60	
Qy	61	CGATCAAGAGGTTCTTCGGCACCCAGCAGCTGTCCCAAGTTCATGGACCCAGAACACCCGC	120	
Db	61	CGATCAAGAGGTTCTTCGGCACCCAGCAGCTGTCCCAAGTTCATGGACCCAGAACACCCGC	120	
Qy	121	TGTCGGGGCTCACCAAGCGCCGCTGTGCGCGCTGTGGGCCCGGGTGTGTCTGTCGCGG	180	
Db	121	TGTCGGGGCTCACCAAGCGCCGCTGTGCGCGCTGTGGGCCCGGGTGTGTCTGTCGCGG	180	
Qy	181	AGCGGGCCGGCTCGAGGTCCGACACGTGCACCCGTCCCACTACGGCCGGATGTGCCCGA	240	
Db	181	AGCGGGCCGGCTCGAGGTCCGACACGTGCACCCGTCCCACTACGGCCGGATGTGCCCGA	240	
Qy	241	TCGAGACCCCGAGGGTCCCAACATCTGATCGGCTCGCTGTCTGCTGTACGCGCGGG	300	
Db	241	TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGCTGTATCGCGGG	300	
Qy	301	TCAACCCGTTCCGGTTTATCGAGACGCCGTACCGGAAGTGGTTCGACGCGTGTCTACCG	360	
Db	301	TCAACCCGTTCCGGTTTATCGAGACGCCGTACCGGAAGTGGTTCGACGCGGTTGTCACCG	360	
Qy	361	ACGAGATCCACTACTTCACGCCCCACGAGGAGGACCGCAGTGGTGGCGCAGGCCCAACT	420	
Db	361	ACGAGATCCACTACTTCACGCCCCACGAGGAGGACCGCAGTGGTGGCGCAGGCCCAACT	420	
Qy	421	CGCCGATCGACGGCAAGGGCCGGTTTCGCGAGGGCCCGGTGCTGGTTCGCGCAAGCGG	480	
Db	421	CGCCGATCGACGACAAAGGGCCGGTTTCGCGAGGGCCCGGTGCTGGTTCGCGCAAGCGG	480	
Qy	481	CGGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGGACNTTKTSCCGCGCCARA	540	
Db	481	CGGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGGACNTTKTSCCGCGCCARA	540	
Qy	541	TGGTGTGGTGGCCACCGCATGATCCGTTCTTCGAGCAGCAGCAGCCACCGTGGCC	600	
Db	541	TGGTGTGGTGGCCACCGCATGATCCGTTCTTCGAGCAGCAGCAGCAGCCACCGTGGCC	600	
Qy	601	TGATGGGGCCCAACATGCAKCGCCAGCGGGTTCGGCTGGTTCGAGCGAGCAGCGCGCTGG	660	
Db	601	TGATGGGGCCCAACATGCAKCGCCAGCGGGTTCGGCTGGTTCGAGCGAGCAGCGCGCTGG	660	
Qy	661	TGGCACCCGATCGAGCTGCGCGCGCATTCGACCGGGAGCT	705	
Db	661	TGGCACCCGATCGAGCTGCGCGCGCATTCGACCGGGAGCT	705	

RESULT 8  
US-09-285-306-12  
; Sequence 12, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Afymetrix, Inc.

```

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCES: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; US-09-285-306-12

```

Query Match	98.6%	Score 695;	DB 9;	Length 705;
Best Local Similarity	98.6%;	Pred. No. 2.5e-153;		
Matches 695;	Conservative 4;	Mismatches 0;	Indels 0;	Gaps 0;

Qy	1	CCGAGAGCTGGAGGCGATACACGCGAGACCCCTGATCAACATCCGTCGCGTCGTCGTCGCGG 60
Db	1	
Qy	61	CGATCAAGGAGTCTTTCGGCACAGCAGCAGCTGTCCCAAGTTCATGGACACAGAAACCCCG 120
Db	61	
Qy	121	TGTCGGGGTCACCCCAAGCGCCGCTGTGCGGGCTTGGGGCCCGGGTGTCGTCTCCCGGG 180
Db	121	
Qy	181	ACGCGGGCGGGCTGGAGTCCGCGACGTGCACCCGTCCCACTACGCGCGGATGTGCCCGA 240
Db	181	
Qy	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCGTGATCGGCTCGCTGTCCGTCGTACGCGCGG 300
Db	241	
Qy	301	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGTCGTCGTCGTCGCGG 360
Db	301	
Qy	361	ACGAGATCCACTACTGACCGCCGACAGAGAGGACCGCACGTCGTCGGCGCAGGCCCACT 420
Db	361	
Qy	421	CGCCCATCGACGGCAAGGGCCGGTTCGCGAGGCCCCGGGTGCTGGTCCCGCCGCAAGCGCG 480
Db	421	
Qy	481	CGAGGTCGAGTACGTGCCCTCTGTCGAGGTGGACTACATGGACNTKTCSCCGCGCCARA 540
Db	481	
Qy	541	TGGTGTCCGTGGCCACCGCGATGATCCGGTTCCTCGAGCAGCAGCAGCCACCGTGC 600
Db	541	
Qy	601	TGATGGGCGCCAAATATGCAKCCAGCGGGTTCGCTGGTGGCGCAGCAGCCACCGTGC 660
Db	601	
Qy	661	TGGGCACCGGATGGAGTTCGCGCGCGATTCGACGCGCGCAGT 705
Db	661	

RESULT 9  
US-09-285-306-13  
; Sequence 13, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas

```
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Qy 61 CGATCAAGGAGTTCTTTCGGCACCCAGCCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTTCGGCACCCAGCCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 120
Qy 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGGGGCTGGGGCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGGGGCTGGGGCCGGGTGGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCGTCCACTACGGCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCGTCCACTACGGCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCAGCGGCTGTCAAC 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCAGCGGCTGTCAAC 360
Qy 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGCAGGCCAACT 420
Qy 421 CGCCGATCGACGACAAGGGCCGGTTTCGCGGAGGCCCGGGTCTGTCTCGCCGCAAGGCG 480
Db 421 CGCCGATCGACGACAAGGGCCGGTTTCGCGGAGGCCCGGGTCTGTCTCGCCGCAAGGCG 480
Qy 481 GCGAGGTCGAGTACGTGCCCTTCGTCGAGGTGGACTACATGGACNTKTCSCCGGCCARA 540
Db 481 GCGAGGTCGAGTACGTGCCCTTCGTCGAGGTGGACTACATGGACNTKTCSCCGGCCARA 540
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGGCC 600
Qy 601 TGATGGGGCCCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCAGCGAGCGCGGTGG 660
Db 601 TGATGGGGCCCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCAGCGAGCGCGGTGG 660
Qy 661 TGGGCAACCGGCATGGAGCTGGCGCGGCGGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGGCATGGAGCTGGCGCGGCGGATCGACGCGCGACGT 705
```

RESULT 10  
US-09-285-306-14  
; Sequence 14, Application US/09285306A  
; Publication No. US20020187467A1

```
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14
```

```
Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Qy 61 CGATCAAGGAGTTCTTTCGGCACCCAGCCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTTCGGCACCCAGCCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 120
Qy 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGGGGCTGGGGCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGGGGCTGGGGCCGGGTGGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCGTCCACTACGGCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCGTCCACTACGGCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCAGCGGCTGTCAAC 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCAGCGGCTGTCAAC 360
Qy 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGCAGGCCAACT 420
Qy 421 CGCCGATCGACGACAAGGGCCGGTTTCGCGGAGGCCCGGGTCTGTCTCGCCGCAAGGCG 480
Db 421 CGCCGATCGACGACAAGGGCCGGTTTCGCGGAGGCCCGGGTCTGTCTCGCCGCAAGGCG 480
Qy 481 GCGAGGTCGAGTACGTGCCCTTCGTCGAGGTGGACTACATGGACNTKTCSCCGGCCARA 540
Db 481 GCGAGGTCGAGTACGTGCCCTTCGTCGAGGTGGACTACATGGACNTKTCSCCGGCCARA 540
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGGCC 600
Qy 601 TGATGGGGCCCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCAGCGAGCGCGGTGG 660
Db 601 TGATGGGGCCCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCAGCGAGCGCGGTGG 660
Qy 661 TGGGCAACCGGCATGGAGCTGGCGCGGCGGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGGCATGGAGCTGGCGCGGCGGATCGACGCGCGACGT 705
```

RESULT 11  
US-09-285-306-16

; Sequence 16, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 16  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-16

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.6%; Pred. No. 2.5e-153;  
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;  
QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCCGTCTGGCGG 60  
DB 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60  
QY 61 CGATCAAGAGGTTCTTCGGCACACGACGCTGTCCAGTTTCATGACACAGAACACCCGC 120  
DB 61 CGATCAAGAGGTTCTTCGGCACACGACGCTGTCCAGTTTCATGACACAGAACACCCGC 120  
QY 121 TGTCCGGGCTCAACCAAGCCCGCTGTTCGGCGCTGGCGCCGGTGGTCTGTCCCGGG 180  
DB 121 TGTCCGGGCTCAACCAAGCCCGCTGTTCGGCGCTGGCGCCGGTGGTCTGTCCCGGG 180  
QY 181 AGCGGCGGGCTGAGGTCGCGAGCTGCACCGCTCCACTACGCGCGGATGTCCCGA 240  
DB 181 AGCGGCGGGCTGAGGTCGCGAGCTGCACCGCTCCACTACGCGCGGATGTCCCGA 240  
QY 241 TCGAGACCCCGAGGGTCCAAACATCGGTTCTGATCGGTCGCTGTGGTGTACGCGCGG 300  
DB 241 TCGAGACCCCGAGGGTCCAAACATCGGTTCTGATCGGTCGCTGTGGTGTATGCGCGG 300  
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGGTACCGAAGTGTTCAGCGCGTGGTCAACG 360  
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCGGTACCGAAGTGTTCAGCGCGTGGTCAACG 360  
QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420  
DB 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420  
QY 421 CGCCGATCGACGGCAAGGCGCGTTTCGCGAGGCGCGGTCTGTCTCGCGCAAGGCGG 480  
DB 421 CGCCGATCGACGAAGGCGCGGTTCGCGAGGCGCGGTCTGTCTCGCGCAAGGCGG 480  
QY 481 GCGAGTCCGAGTACGTGTCCTCTCGTCCGAGGTGGACTACATGACNTKTCSCCGCCCARA 540  
DB 481 GCGAGTCCGAGTACGTGTCCTCTCGTCCGAGGTGGACTACATGACNTKTCSCCGCCCARA 540  
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCACGACGCGCAACCGTGGCC 600  
DB 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCACGACGCGCAACCGTGGCC 600  
QY 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTTCGCTGGTGGCGAGCGCCGCTGG 660  
DB 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTTCGCTGGTGGCGAGCGCCGCTGG 660  
QY 661 TGGGCAACCGGCATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705  
DB 661 TGGGCAACCGGCATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705

RESULT 12  
US-09-285-306-17  
; Sequence 17, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 17  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-17

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.6%; Pred. No. 2.5e-153;  
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;  
QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCCGTCTGGCGG 60  
DB 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60  
QY 61 CGATCAAGAGGTTCTTCGGCACACGACGCTGTCCAGTTTCATGACACAGAACACCCGC 120  
DB 61 CGATCAAGAGGTTCTTCGGCACACGACGCTGTCCAGTTTCATGACACAGAACACCCGC 120  
QY 121 TGTCCGGGCTCAACCAAGCCCGCTGTTCGGCGCTGGCGCCGGTGGTCTGTCCCGGG 180  
DB 121 TGTCCGGGCTCAACCAAGCCCGCTGTTCGGCGCTGGCGCCGGTGGTCTGTCCCGGG 180  
QY 181 AGCGGCGGGCTGAGGTCGCGAGCTGCACCGCTCCACTACGCGCGGATGTGCCCGA 240  
DB 181 AGCGGCGGGCTGAGGTCGCGAGCTGCACCGCTCCACTACGCGCGGATGTGCCCGA 240  
QY 241 TCGAGACCCCGAGGGTCCAAACATCGGTTCTGATCGGTCGCTGTGGTGTACGCGCGG 300  
DB 241 TCGAGACCCCGAGGGTCCAAACATCGGTTCTGATCGGTCGCTGTGGTGTATGCGCGG 300  
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGGTACCGAAGTGTTCAGCGCGTGGTCAACG 360  
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCGGTACCGAAGTGTTCAGCGCGTGGTCAACG 360  
QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420  
DB 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420  
QY 421 CGCCGATCGACGGCAAGGCGCGTTTCGCGAGGCGCGGTCTGTCTCGCGCAAGGCGG 480  
DB 421 CGCCGATCGACGAAGGCGCGGTTCGCGAGGCGCGGTCTGTCTCGCGCAAGGCGG 480  
QY 481 GCGAGTCCGAGTACGTGTCCTCTCGTCCGAGGTGGACTACATGACNTKTCSCCGCCCARA 540  
DB 481 GCGAGTCCGAGTACGTGTCCTCTCGTCCGAGGTGGACTACATGACNTKTCSCCGCCCARA 540  
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCACGACGCGCAACCGTGGCC 600  
DB 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCACGACGCGCAACCGTGGCC 600  
QY 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTTCGCTGGTGGCGAGCGCCGCTGG 660  
DB 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTTCGCTGGTGGCGAGCGCCGCTGG 660  
QY 661 TGGGCAACCGGCATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705  
DB 661 TGGGCAACCGGCATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705

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RESULT 13
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCCGTCCGTCGTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCCGTCCGTCGTGGCGG 60

Qy 61 CGATCAAGAGGATTCTTCGGCACCCAGCCAGCTGTCCAGTTTCATGGACCCAGAACCAACCGC 120
Db 61 CGATCAAGAGGATTCTTCGGCACCCAGCCAGCTGTCCAGTTTCATGGACCCAGAACCAACCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTTCGGGGCTGGGCGGCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTTCGGGGCTGGGCGGCGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTGGAGTTCGGACGTCGACCGTCCACTACGGCCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGACGTCGACCGTCCACTACGGCCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTCGCTGTGGTGTACGCGGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTCGCTGTGGTGTATGCGGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGAGCGGCTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGAGCGGCTGTACCG 360

Qy 361 ACAGATCCACTACTGACCCCGCAGAGGAGGACCGCACGTGGTGGCGCAGGCCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGCAGAGGAGGACCGCACGTGGTGGCGCAGGCCCAACT 420

Qy 421 CGCGCATCGACGACAAAGGCGCGTTCCGCGAGGCGCCGGTCTGGTTCGCGCGCAGGCGG 480
Db 421 CGCGCATCGACGACAAAGGCGCGTTCCGCGAGGCGCCGGTCTGGTTCGCGCGCAGGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGCGGTTCCGCTGGTGGCAGCGCGCGCTGG 660
Db 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGCGGTTCCGCTGGTGGCAGCGCGCGCTGG 660

Qy 661 TGGGACCCGGCATGGAGCTGCGCGCGCGCATCGACGCGCGGACGT 705
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Db 661 TGGGACCCGGCATGGAGCTGCGCGCGCGCATCGACGCGCGGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

Query Match      98.3%; Score 693; DB 9; Length 705;
Best Local Similarity 98.3%; Pred. No. 7.2e-153;
Matches 693; Conservative 4; Mismatches 8; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCCGTCCGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCCGTCCGTCGTGGCGG 60

Qy 61 CGATCAAGAGGATTCTTCGGCACCCAGCCAGCTGTCCAGTTTCATGGACCCAGAACCAACCGC 120
Db 61 CGATCAAGAGGATTCTTCGGCACCCAGCCAGCTGTCCAGTTTCATGGACCCAGAACCAACCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTTCGGGGCTGGGCGGCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTTCGGGGCTGGGCGGCGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTGGAGTTCGGAGTTCGGACGTCGACCGTCCACTACGGCCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGAGTTCGGACGTCGACCGTCCACTACGGCCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGTCTCGCTGTGGTGTACGCGGGG 300
Db 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGTCTCGCTGTGGTGTACGCGGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGAGCGGCTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGAGCGGCTGTACCG 360

Qy 361 ACAGATCCACTACTGACCCCGCAGAGGAGGACCGCACGTGGTGGCGCAGGCCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGCAGAGGAGGACCGCACGTGGTGGCGCAGGCCCAACT 420

Qy 421 CGCGCATCGACGCGCAAGGCGCGTTTCGCGAGGCGCCGGTCTGGTTCGCGCGCAGGCGG 480
Db 421 CGCGCATCGACGCGCAAGGCGCGTTTCGCGAGGCGCCGGTCTGGTTCGCGCGCAGGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGCGGTTCCGCTGGTGGCAGCGCGCGCTGG 540
Db 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGCGGTTCCGCTGGTGGCAGCGCGCGCTGG 540
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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds  
(without alignments)  
11150.034 Million cell updates/sec

Title: US-09-285-306-4

Perfect score: 705

Sequence: 1 cccagcgctggagcgatc.....ggcgatcgagcgcgacgt 705

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
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20	528.8	75.0	620	3	US-08-520-946-139
21	528.8	75.0	620	3	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	5099	4	US-09-887-052-1

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appli
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appli
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
C 31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, App
C 32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
35	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
37	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
41	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
42	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
44	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
C 45	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App

#### ALIGNMENTS

#### RESULT 1

US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Strayer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/797,812  
; FILING DATE: 07-FEB-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/017,765  
; FILING DATE: 15-MAY-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/629,031  
; FILING DATE: 08-APR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/012,631  
; FILING DATE: 01-MAR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/011,339  
; FILING DATE: 08-FEB-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fitts, Renee A.  
; REGISTRATION NUMBER: 35,136  
; REFERENCE/DOCKET NUMBER: 16528X-018550  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-326-2400  
; TELEFAX: 415-326-2422

;  
; INFORMATION FOR SEQ ID NO: 24:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 706 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
US-08-797-812-24

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Query Match      86.6%; Score 610.6; DB 3; Length 706;
Best Local Similarity 91.6%; Pred. No. 1.1e-118;
Matches 646; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCACACCGCAGACCCCTGATCAACATCCGTCACAGTCGTGGCGG 60
Db 2 CCCAGGACGTGGAGCGCATCACACCGCAGAGTTGATCAACATCCGCGCGTGTGCGCG 61

Qy 61 CGATCAAGAGTTCTTCGGCAACGACCGAGCTGTCCAGTTTCATGGAACAGAACCCGC 120
Db 62 CGATCAAGAGTTCTTCGGCAACGACCGAGCTGAGCCAAATTCATGGAACAGAACCCGC 121

Qy 121 TGTGGGGCTCACCAACAGCGCGCTGTGGCGCTGGGCGCGGTGTGTCTGCCGG 180
Db 122 TGTGGGGTTGACCAACAGCGCGACTGTGCGCGCTGGGCGCGGTGTGTCAAGTG 181

Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTAGCGCGGATGTGCCGA 240
Db 182 AGCGTGGCGGCTGGAGTTCGCGACGTGCAACCGTCCCACTAGCGCGGATGTGCCGA 241

Qy 241 TCGAGA CCCCAGAGGGTCCCAACATCGGTTCGATCGGCTCGCTGTGATGTCGCGGG 300
Db 242 TCGAAA CCCCAGAGGGTCCCAACATCGGTTCGATCGGCTCGCTGTGATGTCGCGGG 301

Qy 301 TCACCCGTTCCGCGTTTCATCGAGAGCGCGTACCCAGAGTGGTTCGA CCGGTGTGACCG 360
Db 302 TCACCCGTTCCGCGTTTCATCGAAA CCGCGTACCCAGAGTGGTTCGA CCGGTGTGACCG 361

Qy 361 ACAGAGTCCACTACTGACCCCGCAGCAGGAGGACCGCACGTGGTGGCGCAGGCCAACT 420
Db 362 ACAGATCGTGTACTGACCCCGCAGCAGGAGGACCGCACGTGGTGGCAGGCCAACT 421

Qy 421 CGCGATCGACGA CAAGGCGCGTTTCGCGAGGCGCGGCTGTGTCGCGCGCAGGCGG 480
Db 422 CGCGATCGATGCGGACCGGTTCGTTTCGAGCGCGCGTGTGTCGCGCGCAGGCGG 481

Qy 481 GCAGAGTTCGAGTTCGCTTCGTCGAGTGGAGTACATGGA CGTCTCGCGCGCGCAGA 540
Db 482 GCAGAGTTCGAGTTCGCTTCGTCGAGTGGAGTACATGGA CGTCTCGCGCGCGCAGA 541

Qy 541 TGGTGTGGTGGCCACCGCATGATCCCGTTTCCTCGAGCAGCA CAGCCCAACCGTGC 600
Db 542 TGGTGTGGTGGCCACCGCATGATTCCTTCCTGAGCAGCA CAGCCCAACCGTGC 601

Qy 601 TGATGGCGCCAA CATGACGCGCAGCGGTTCCGCTGTTGTCGAGCAGGCGCGCTGG 660
Db 602 TCATGGGGGCAAA CATGACGCGCAGCGGTTCCGCTGTTGTCGAGCAGGCGCGCTGG 661

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGGATCGAGCGGACGT 705
Db 662 TGGGCACCGGATGGAGCTGCGCGCGGATCGAGCGGACGT 706
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RESULT 2  
US-09-103-840A-2  
; Sequence 2, Application US/09103840A  
; Patent No. 6294328  
; GENERAL INFORMATION:  
; APPLICANT: FLEISCHMAN, Robert D.  
; APPLICANT: WHITE, Owen R.  
; APPLICANT: FRASER, Claire M.  
; APPLICANT: VENTER, John C.  
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM  
; TITLE OF INVENTION: TUBERCULOSIS

;  
; FILE REFERENCE: 24366-20007.00  
; CURRENT APPLICATION NUMBER: US/09/103,840A  
; CURRENT FILING DATE: 1998-06-24  
; NUMBER OF SEQ ID NOS: 2  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 4403765  
; TYPE: DNA  
; ORGANISM: Mycobacterium tuberculosis  
; FEATURE:  
; OTHER INFORMATION: CDC 1551  
; OTHER INFORMATION: "n" bases at various positions throughout the sequence  
; OTHER INFORMATION: represent a, t, c or g  
US-09-103-840A-2

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Query Match      85.5%; Score 603; DB 3; Length 4403765;
Best Local Similarity 91.4%; Pred. No. 1.2e-116;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACAGTCGTGGCGG 60
Db 762963 CCCAGGACGTGGAGGCGATCACACCGCAGAGCTTGTATCAACATCCGCGCGTGTGCGCG 763022

Qy 61 CGATCAAGAGTTCTTCGGCAACGACCGAGCTGTCCAGTTTCATGGAACAGAACCCGC 120
Db 763023 CGATCAAGAGTTCTTCGGCAACGACCGAGCTGAGCCAAATTCATGGAACAGAACCCGC 763082

Qy 121 TGTGGGGCTCACCAACAGCGCGCTGTGGCGCTGGGCGCGGTGTGTCTGCCGG 180
Db 763083 TGTGGGGTTGACCCAAAGCGCGACTGTGCGCGCTGGGCGCGGTGTGTACGTG 763142

Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTAGCGCGGATGTGCCGA 240
Db 763143 AGCGTGGCGGCTGGAGTTCGCGACGTGCAACCGTCCCACTAGCGCGGATGTGCCGA 763202

Qy 241 TCGAGAC CCCCAGAGGGTCCCAA CATCGGTTCGATCGGCTCGCTGTGATGTCGCGGG 300
Db 763203 TCGAAA CCCCAGAGGGTCCCAA CATCGGTTCGATCGGCTCGCTGTGATGTCGCGGG 763262

Qy 301 TCACCCGTTCCGCGTTTCATCGAGACCGCGTACCGCAGAGTGGTTCGAGCGGTGTGTCACCG 360
Db 763263 TCACCCGTTCCGCGTTTCATCGAAA CCGCGTACCGCAGAGTGGTTCGAGCGGTGTGTCACCG 763322

Qy 361 ACAGATTCCACTACTGACCCCGCAGCAGGAGGACCGCACGTGGTGGCGCAGGCCAACT 420
Db 763323 ACAGATCGTGTACTGACCCCGCAGCAGGAGGACCGCACGTGGTGGCAGGCCAACT 763382

Qy 421 CGCGATTCGACGA CAAGGCGCGTTTCGCGAGGCGCGGTTGCTGTCGCGCGCAGGCGG 480
Db 763383 CGCGATTCGATGCGGACCGGTTCGTTTCGAGCGCGCGTGTGTCGCGCGCAGGCGG 763442

Qy 481 GCAGGTTCGAGTTCGCTTCGTCGAGTGGAGTACATGGA CGTCTCGCGCGCGCAGA 540
Db 763443 GCAGGTTCGAGTTCGCTTCGTCGAGTGGAGTACATGGA CGTCTCGCGCGCGCAGA 763502

Qy 541 TGTGTGCGTGGCCACCGCATGATCCCGTTTCCTCGAGCAGCA CAGCCCAACCGTGC 600
Db 763503 TGTGTGCGTGGCCACCGCATGATTCCTTCCTGAGCAGCA CAGCCCAACCGTGC 763562

Qy 601 TGATGGCGCCAA CATGACGCGCAGCGGTTCCGCTGTTGTCGAGCAGGCGCGCTGG 660
Db 763563 TCATGGGGGCAAA CATGACGCGCAGCGGTTCCGCTGTTGTCGAGCAGGCGCGCTGG 763622

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGGATCGAGCGG 699
Db 763623 TGGGCACCGGATGGAGCTGCGCGCGGATCGAGCGG 763661
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RESULT 3  
US-09-103-840A-1  
; Sequence 1, Application US/09103840A  
; Patent No. 6294328  
; GENERAL INFORMATION:



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; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116; Mismatches 60; Indels 0; Gaps 0;
Matches 639; Conservative 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
DB 761003 CCCAGGACGTGGAGGCGATCACACCGCAGACCGTGTGATCAACATCCGTCTGGCGG 761062

QY 61 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTCCAGTTCATGACACAGAAACCCGC 120
DB 761063 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTGAGCAATTCATGACACAGAAACCCGC 761122

QY 121 TGTCCGGGCTACCCACAGCGCGCCCTGTGCGCGCTGGCGCGGTGTCTGTCCCGG 180
DB 761123 TGTCCGGGCTGTGACCCACAGCGCGCCCTGTGCGCGCTGGCGCGGTGTCTGTCCCGG 761182

QY 181 AGCGGCGCGGCTGGAGTTCGCGACGTGACCCGCTCCACCTACCGCGCGGATGTGCCCGA 240
DB 761183 AGCGTCCGGGCTGGAGTTCGCGACGTGACCCGCTCCACCTACCGCGCGGATGTGCCCGA 761242

QY 241 TCGAGACCCCGAGGCTCCAAACATCGTCTGATCGGTCTGTCTGCTGTATGCGCGG 300
DB 761243 TCGAAACCCCTGAGGCGGCGCAACATCGTCTGATCGGTCTGTCTGCTGTATGCGCGG 761302

QY 301 TCAACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGTGTGTACACGCGGTGTACCG 360
DB 761303 TCAACCCGTTCCGGTTCATCGAGAAACCGCGTACCGCAAGTGTGTACACGCGGTGTACCG 761362

QY 361 AGGAGATCCACTTACCTGACCGCGCGACGAGGAGACCGCACCTGTGTGGCGAGGCAACT 420
DB 761363 AGGAGATCGTGTACTGTACCGCGCGACGAGGAGACCGCACCTGTGTGGCGAGGCAACT 761422

QY 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTGTGTCTGCGCGCAAGGCGG 480
DB 761423 CGCCGATCGATCGGACGCGTCTGTTTGTGTGAGCGCGCGGTTGTGTCTGCGCGCAAGGCGG 761482

QY 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGATCTACATGACATGTGTGCGCGCGCGAGA 540
DB 761483 GCGAGGTGAGTACGTGCCCTCGTCTGAGGTGATCTACATGACATGTGTGCGCGCGCGAGA 761542

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCTGAGCAGCAGCAGCAGCAGCGTGTGCC 600
DB 761543 TGGTGTGCGTGGCCACCGCGATGATCCCTTCTGAGCAGCAGCAGCAGCAGCGTGTGCC 761602

QY 601 TGATGGGCGCAACATGACGCGCGCGGTTCCGCTGTGTGTGCGCAGCAGGCGCGCGTGG 660
DB 761603 TCATGGGCGCAACATGACGCGCGCGGTTCCGCTGTGTGTGCGCAGCAGGCGCGCGTGG 761662

QY 661 TGGGACCGGCGATGAGCTGTGCGCGCGCGATCGACCGG 699
DB 761663 TGGGACCGGCGATGAGCTGTGCGCGCGCGATCGACCGG 761701

RESULT 4
US-08-313-185-57
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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telmer, Thomas
; APPLICANT: Bodmer, Amalio
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57

Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
DB 1124 CCCAGGACGTGGAGGCGATCACACCGCAGACCGTGTATCAATATCCGTCCGTCTGGCGG 1183

QY 61 CGATCAAGAGTTCCTTCGGCACCAGCGCGCTGTCCCAGTTCATGACACAGAACACCCGC 120
DB 1184 CTATCAAGAGTTCCTTCGGCACCAGCGCGCTGTCCCAGTTCATGATCAGAACACCCCTC 1243

QY 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCGCTGTCTGTCTCCCGG 180
DB 1244 TGTCCGGGCTGACCCACAAAGCGCGCTGTGCGCGCTGGCGCGCTGTCTGTCTCCCGG 1303

QY 181 AGCGGCGCGGCTGGAGTTCGCGACGTCGCGACCGCTCCCACTACGCGCGGATGTGCCCGA 240
DB 1304 AGCGTCCGGGCTAGAGTTCGCGACGTCGCGACCGCTTCGCACTACGCGCGGATGTGCCCGA 1363

QY 241 TCGAGACCCCGAGGCTCCAAACATCGGTCTGATCGGCTCGCTGTCTGTATGCGCGG 300
DB 1364 TCGAGACTCCCGAGGCGCGCAACATAGGTCTGATCGGTTCATTTGTCTGCTGTACGCGG 1423

QY 301 TCAACCCGTTCCGGTTCATTCGAGACGCGCTACCGCAAGTGTGTGACGCGGTGTGTACCG 360
DB 1424 TCAACCCGTTCCGGTTCATTCGAGAAACCGGTACCGCAAGTGTGTGACGCGGTGTGTACCG 1483
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; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

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Query Match 76.7%; Score 540.4; DB 1; Length 970;  
 Best Local Similarity 91.1%; Pred. No. 5e-104;  
 Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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Qy 1 CCCAGGAGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGCGG 60
Db 341 CCCAGGAGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGCGG 400

Qy 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCAGTTCATGACCAAGCAACACCGC 120
Db 401 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGATGACCAATTCATGACCAACACCGC 460

Qy 121 TGTGGGGCTCAACCAAGCGCCGCTGTGCGGCGCTGGGCGCGGTGTGTCTGCCGG 180
Db 461 TGTGGGGTTGACCCACAGCGCCGACTGTGCGGCGTGGGCGCGGTGTGTCTGCCGG 520

Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACACCGTCCACTACGCGCGGATGTCGCGA 240
Db 521 AGCGTGGCGGTGGAGAGCGCGACGTGACCCGTGCGACTACGCGCGGATGTCGCGA 580

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGGG 300
Db 581 TCGAACCCTTGAGGGGCGCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGGG 640

Qy 301 TCAACCCGTTGGGTTTCATCGAGACGCGGTACCGCAAGGTGTGACGCGGTGTGTACCG 360
Db 641 TCAACCCGTTGGGTTTCATCGAAGCGCGGTACCGCAAGGTGTGTGACGCGGTGTGTACCG 700

Qy 361 ACGAGATCCACTACCTGACCGCGAGGAGGAGCGGACCGCTGCTGTCGCGCGGAGGCGG 420
Db 701 ACGAGATCGTGATCTGACCGCGAGGAGGAGCGGACCGCTGCTGTCGCGCGGAGGCGG 760

Qy 421 CGCCCATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGCTGTGTCGCGCGGAGGCGG 480
Db 761 CGCCCATCGATCGGAGCGGTGCTGTCGTCGAGCGCGGCTGTGTCGCGCGGAGGCGG 820

Qy 481 GCGAGGTGAGTACGTGCGCTGTCGAGAGTGGACTATGAGACGTGTGCGCGCGGCGGAG 540
Db 821 GCGAGGTGAGTACGTGCGCTGTCGAGAGTGGACTATGAGACGTGTGCGCGCGGCGGAG 880

Qy 541 TGGTGTGCGTGGCACCAGCGATGATCCGTTCTCGAGACGACGACGACGACGACGACG 600
Db 881 TGGTGTGCGTGGCACCAGCGATGATTCCTTCTCGAGACGACGACGACGACGACGACG 940

Qy 601 TGATGGGCGCGCAACATGACGCGCGGAGGCGG 630
Db 941 TCATGGGCGCGCAACATGACGCGCGGAGGCGG 970

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RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105WO1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1

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Query Match 76.7%; Score 540.4; DB 5; Length 970;  
 Best Local Similarity 91.1%; Pred. No. 5e-104;  
 Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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Qy 1 CCCAGGAGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGCGG 60
Db 341 CCCAGGAGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGCGG 400

Qy 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCAGTTCATGACCAAGCAACACCGC 120
Db 401 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGATGACCAATTCATGACCAACACCGC 460

Qy 121 TGTGGGGCTCAACCAAGCGCCGCTGTGCGGCGCTGGGCGCGGTGTGTCTGCCGG 180
Db 461 TGTGGGGTTGACCCACAGCGCGGACTGTGCGGCGTGGGCGCGGTGTGTCTGCCGG 520

Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACACCGTCCACTACGCGCGGATGTCGCGA 240
Db 521 AGCGTGGCGGTGGAGAGCGCGACGTGACCCGTGCGACTACGCGCGGATGTCGCGA 580

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGGG 300
Db 581 TCGAACCCTTGAGGGGCGCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGGG 640

Qy 301 TCAACCCGTTGGGTTTCATCGAGACGCGGTACCGCAAGGTGTGACGCGGTGTGTACCG 360
Db 641 TCAACCCGTTGGGTTTCATCGAAGCGCGGTACCGCAAGGTGTGTGACGCGGTGTGTACCG 700

Qy 361 ACGAGATCCACTACCTGACCGCGGAGGAGGAGCGGACCGCTGCTGTCGCGCGGAGGCGG 420

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Db 701 ACGAGATCGTGTACCTGACCCGCGAGGAGGACCCGCCACGTGGTGGCACAGGCCCAATT 760  
Qy 421 CGCCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCGGGTCTGTGTCGCGCGCAAGGCGG 480  
Db 761 CGCCGATCGATGCGGACGGTTCGTCGTTCGAGCGCGCGTGTGTCTCGCGCGCAAGGCGG 820  
Qy 481 GCGAGGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGAGACGTCTCGCCCCGCCAGA 540  
Db 821 GCGAGGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGAGACGTCTCGCCCCGCCAGA 880  
Qy 541 TGGTGTTCGTTGGCGACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCCAACGTTGCC 600  
Db 881 TGGTGTTCGTTGGCGACCGCGATGATTCCTCTTCGAGCAGCAGACGCCAACGTTGCC 940  
Qy 601 TGATGGGCGCCAAACATGACGCGCCAGGCGG 630  
Db 941 TCATGGGGGCAACATGACGCGCCAGGCGG 970  
RESULT 8  
US-08-757-653-135  
; Sequence 135, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; FILING DATE: US/08/757,653  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; US-08-757-653-135  
Query Match 75.2%; Score 530.4; DB 2; Length 620;  
Best Local Similarity 91.0%; Pred. No. 5.8e-102;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
Qy 36 ATCAACATCCGTCCAGTCGTGGCGCGATCAAGGAGTTCTTCGGCACCGACGAGTCGTCC 95  
Db 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACCGACGAGTCGAGC 60  
Qy 96 CAGTTTCATGGACGAGCAACACCGTGTCCGGGTCCACCAACAGCGCGCGCTGTCCGCG 155  
Db 61 CAATTTCATGGACGAGCAACACCGTGTCCGGGTTCACCAACAGCGCGCGACTGTCCGCG 120

Qy 156 CTGGCCCGGGTGTCTGTCTCCCGGAGCGGCGCGGCTCGAGGTCGCGAGTCGACCCG 215  
Db 121 CTGGCCCGGGTGTCTGTCACTGAGCGTCCGGGCTCGAGGTCGCGAGTCGACCCG 180  
Qy 216 TCCCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGCGCGGATGTCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
Qy 276 GGCTCGCTGTTCGTTGATGCGCGGTCACCCGTTCCGGTTTCATCGAGACGCCGTACCGC 335  
Db 241 GGCTCGCTGTTCGTTGATGCGCGGTCACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 300  
Qy 336 AAGTGTGTTCGAGCGGTGTCACCGAGATCCACTACCTGACGCGCGGACGAGGAGGAC 395  
Db 301 AAGTGTGTTCGAGCGGTGTCACCGAGATCCACTACCTGACGCGCGGACGAGGAGGAC 360  
Qy 396 CGCCACGTGTGCGCAGGCGCAACTCGCCGATCGAACGAGGCGCGGTTCGCGGAGGCC 455  
Db 361 CGCCACGTGTGCGCAGGCGCAATTCCCGATCGATCGGACGGTCTGTCGAGGTCGAC 420  
Qy 456 CGGTGTGTTCGCGCGGAGGCGGCGAGTTCGAGTACGTCCTCGTCCGAGTCCGAC 515  
Db 421 CGGTGTGTTCGCGCGGAGGCGGCGAGTTCGAGTACGTCCTCGTCCGAGTCCGAC 480  
Qy 516 TACATGAGACGTGTTCGCGCGGAGATGTTGCGGTGGCCACCGCGATGATCCCTTCCTC 575  
Db 481 TACATGAGACGTGTTCGCGCGGAGATGTTGCGGTGGCCACCGCGATGATCCCTTCCTC 540  
Qy 576 GAGCACGACGACGCAACCGTGCCTGATGGGCGCCAAACATGACGCGCGGCGGTTCG 635  
Db 541 GAGCACGACGACGCAACCGTGCCTGATGGGCGCCAAACATGACGCGCGGCGGTTCG 600  
Qy 636 CTGTCGCGCAGGCGCGCC 655  
Db 601 CTGTCGTCGAGCGAGGCCCC 620  
RESULT 9  
US-08-757-653-138/c  
; Sequence 138, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; FILING DATE: US/08/757,653  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTGTGCGCGGATCAAGAGGATCTTCGGCACAGCCAGCTGTCC 95
DB 620 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGGATCTTCGGCACAGCCAGCTGAGC 561

QY 96 CAGTTTCATGACACAGAACACCCGCTGTGCGGGCTCACCCACAAGCGCGCTGTGCGG 155
DB 560 CAATTTCATGACACAGAACACCCGCTGTGCGGGTTGACCCACAAGCGCGCTGTGCGG 501

QY 156 CTGGGCGCGGTGTGCTGCTCGGAGAGCGCGGCTGGAGGTCCGGACGTCGACCCG 215
DB 500 CTGGGCGCGCGGTGTGCTGCTCGGAGCGTGTGCGGGCTGGAGGTCCGGACGTCGACCCG 441

QY 216 TCCCACTACGCGCGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
DB 440 TCGCACTACGCGCGATGTCGCGGATCGAGAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GCGTCGCTGTGCTGCTGATGCGCGGCTCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGC 335
DB 380 GCGTCGCTGTGCTGCTGATGCGCGGCTCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGC 321

QY 336 AAGTGTGTGACGCGGTGTGTCACGACGAGATCCACTACCTGACCGCGGACGAGGAGGAC 395
DB 320 AAGTGTGTGACGCGGTGTGTCACGACGAGATCCACTACCTGACCGCGGACGAGGAGGAC 261

QY 396 GCGCACGTGTGCGCGAGCCAACTCGCGATCGACGACCAAGGGCGGTTCCGCGAGGCC 455
DB 260 GCGCACGTGTGCGCGAGCCAACTCGCGGATCGAGTGGGAGCGGTCTGTCGAGCGG 201

QY 456 GCGGTGTGCTGCTGCGCGGAGCGGCGAGTGTGAGTACGTGCTGCTGCGAGGTGAC 515
DB 200 GCGGTGTGCTGCTGCGCGGAGCGGCGGAGTGTGAGTACGTGCTGCTGAGGTGAC 141

QY 516 TACATGAGAGTGTGCGCGGCGAGATGTGTGCGGTGGCCACCGCGATGATCCCGTTCTC 575
DB 140 TACATGAGAGTGTGCGCGGCGAGATGTGTGCGGTGGCCACCGCGATGATCCCGTTCTC 81

QY 576 GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCGAGCGGTCCG 635
DB 80 GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCGAGCGGTCCG 21

QY 636 CTGGTCCGAGCAGGCGGCC 655
DB 20 CTGGTCCGAGCAGGCGGCC 1

RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSER: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

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; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match          75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTGTGCGCGGATCAAGAGGATCTTCGGCACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGGATCTTCGGCACAGCCAGCTGAGC 60

QY 96 CAGTTTCATGACACAGAACACCCGCTGTGCGGGCTCACCCACAAGCGCGCTGTGCGGCG 155
DB 61 CAATTTCATGACACAGAACACCCGCTGTGCGGGTTGACCCACAAGCGCGCTGTGCGGCG 120

QY 156 CTGGGCGCGGTGTGCTGCTCGGAGAGCGGCGCGGTGGAGGTCCGCGACGTCGACCCG 215
DB 121 CTGGGCGCGGTGTGCTGCTGACGTGAGCGTGTGCGGGTGGAGGTCCGCGACGTCGACCCG 180

QY 216 TCCCACTACGCGCGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGATGTCGCGGATCGAGAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GCGTCGCTGTGCTGCTGATGCGCGGCTCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGC 335
DB 241 GCGTCGCTGTGCTGCTGATGCGCGGCTCAACCCGTTTCGGGTTTCATCGAGAACGCGTACCGC 300

QY 336 AAGTGTGTGACGCGGTGTGTCACGACGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
DB 301 AAGTGTGTGACGCGGTGTGTCACGACGAGATCCGTGACCTGACCGCGCGAGGAGGAC 360

QY 396 GCGCACGTGTGCGCGAGGCCAACTCGCGGATCGACGACCAAGGGCGGTTCCGCGAGGCC 455
DB 361 GCGCACGTGTGCGCGAGGCCAACTCGCGGATCGACGACGAGGTCCGCTTCGTCGAGCGC 420

QY 456 GCGGTGTGCTGCTGCGCGGAGCGGCGAGTGTGAGTACGTGCTGCTGCGAGGTGAC 515
DB 421 GCGGTGTGCTGCTGCGCGGAGCGGCGGAGTGTGAGTACGTGCTGCTGCGAGGTGAC 480

QY 516 TACATGAGAGTGTGCGCGCGCAGATGTGTGCGGTGGCCACCGCGATGATCCCGTTCTC 575
DB 481 TACATGAGAGTGTGCGCGCGCAGATGTGTGCGGTGGCCACCGCGATGATTCCTTCCTG 540

QY 576 GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCGAGCGGTCCG 635
DB 541 GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCGAGCGGTCCG 600

QY 636 CTGGTCCGAGCAGGCGGCC 655
DB CTGGTCCGAGCAGGCGGCC 1
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Db      601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROM, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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Db      |||
Qy      620 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGAGC 561
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Qy      96 CAGTTCATGACAGAACAAACCGCTGTCCGGGTTACCCAAAGCCGCGCTGTCCGGCG 155
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Db      |||
Qy      440 TCGCACTACGCCCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381
Db      |||
Qy      276 GGCTCGCTGTCCGTTGATGCGCGGTCAACCCGTTCCGGTTTCATCGAGACCCGTAACCG 335
Db      |||
Qy      380 GGCTCGCTGTCCGTTGATGCGCGGTCAACCCGTTCCGGTTTCATCGAAACCCGTAACCG 321
Db      |||
Qy      336 AAGTGTGTCGACGCGGTGTCACCGAGAGATCCACTACCTGACCGCGGACGAGGAGAC 395
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Qy      396 CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGACGACAAGGCGCGGTTCGCGAGGCC 455
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Db      |||
Qy      456 CGGTGTGTGTTCGCGCCAAAGGCGGCGAGGTGAGTACGTGCGCTTCGTCGAGGTGAC 515
Db      |||
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Qy      516 TACATGACGTGTGCGCGCCAGAGTGTGCGGTGCGCACCGCGATGATCCGCTTCCTC 575
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Db      |||
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RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROM, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCCGCGGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCC 95
Db      |||
Qy      1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGAGC 60

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Qy



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Qy 396 CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGGCCGGTTTCGGGAGGCC 455
Db 361 CGCCACGTGGTGGCACAGGCCAATTCCGCCGATCGATGGGACGGTCGCTTCGTCAGCCG 420
Qy 456 CGGGTGTCTGGTCCGCCGCAAGCGGGCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGAC 515
Db 421 CGCGTGTCTGGTCCGCCGCAAGCGGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480
Qy 516 TACATGGAGCGTGTCCCGCGCCAGATGGTTCGGTGGCCACCGCGATGATCCCGTTCTC 575
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Qy 576 GAGCAGCAGCAGCGCCAAACCGTCCCTGATGGGCGCCAAACATGCGCAGCGCCAGCGGTTCCG 635
Db 541 GAGCAGCAGCAGCGCCAAACCGTCCCTCATGGGGGCAAAACATGCGCAGCGCCAGCGGTCGG 600
Qy 636 CTGTTGCGCAGCGAGCGGCC 655
Db 601 CTGTTGCGTAGCGAGGCCCC 620
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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds  
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Scoring table: IDENTITY\_NUC

Gapop 10.0 , Capext 1.0

Searched: 7331713 seqs, 3271544945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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26: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	705	9 US-09-285-306-1	Sequence 1, Appli
2	705	100.0	705	9 US-09-285-306-28	Sequence 28, Appl
3	697.4	98.9	3288	17 US-10-282-122A-26193	Sequence 26193, A
4	697.4	98.9	3519	9 US-09-712-363-30	Sequence 30, Appl
5	697.4	98.9	3519	17 US-10-282-122A-28230	Sequence 28230, A
6	687	97.4	687	9 US-09-285-306-29	Sequence 29, Appl
7	620.2	88.0	705	9 US-09-285-306-181	Sequence 181, Appl

8	620	87.9	620	10 US-09-940-925A-135	Sequence 135, App
9	620	87.9	620	10 US-09-940-925A-138	Sequence 138, App
10	620	87.9	620	10 US-09-941-193A-135	Sequence 135, App
11	620	87.9	620	10 US-09-941-193A-138	Sequence 138, App
12	620	87.9	620	22 US-10-409-594-135	Sequence 135, App
13	620	87.9	620	22 US-10-409-594-138	Sequence 138, App
14	618.4	87.7	620	10 US-09-940-925A-136	Sequence 136, App
15	618.4	87.7	620	10 US-09-940-925A-137	Sequence 137, App
16	618.4	87.7	620	10 US-09-940-925A-139	Sequence 139, App
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18	618.4	87.7	620	10 US-09-941-193A-136	Sequence 136, App
19	618.4	87.7	620	10 US-09-941-193A-137	Sequence 137, App
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21	618.4	87.7	620	10 US-09-941-193A-140	Sequence 140, App
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32	613.8	87.1	705	9 US-09-285-306-96	Sequence 96, Appl
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36	612.2	86.8	705	9 US-09-285-306-94	Sequence 94, Appl
37	612.2	86.8	705	9 US-09-285-306-95	Sequence 95, Appl
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39	610.6	86.6	705	9 US-09-285-306-4	Sequence 4, Appli
40	610.6	86.6	705	9 US-09-285-306-5	Sequence 5, Appli
41	610.6	86.6	705	9 US-09-285-306-6	Sequence 6, Appli
42	610.6	86.6	705	9 US-09-285-306-7	Sequence 7, Appli
43	610.6	86.6	705	9 US-09-285-306-8	Sequence 8, Appli
44	610.6	86.6	705	9 US-09-285-306-9	Sequence 9, Appli
45	610.6	86.6	705	9 US-09-285-306-12	Sequence 12, Appl

## ALIGNMENTS

RESULT 1  
US-09-285-306-1  
; Sequence 1, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jory  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 1  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium tuberculosis  
US-09-285-306-1

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 4.4e-173;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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DB 1 CCCAGAGCTGGAGCGGATCAACCGCAGACGCTTGATCAACATCCGCGCGGTGGTCCGC 60  
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QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGCCAATTTCATGGACCAAGAACCAACCCGC 120  
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61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGCCAATTTCATGGACCAAGAACCAACCCGC 120  
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181 AGCGTCCGGGTTGACCAACAGCCCGACGTCTCGGCGTGGGGCCCGCGGTCTGTACGTG 240  
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Db |||||  
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Db |||||  
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; Sequence 28, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 28  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium bovis  
US-09-285-306-28

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 4.4e-173;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCAGACGTGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCGGTGTCGCG 60  
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Db 1 CCCAGACGTGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCGGTGTCGCG 60  
QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGCCAATTTCATGGACCAAGAACCAACCCGC 120  
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Db |||||  
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481 GCGAGGTGAGTACGTGCGCTCGTCTGAGGTGGACTACATGGAAGCTTCGCCCCGCCAGA 540  
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Db |||||  
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; Sequence 26193, Application US/10282122A  
; Publication No. US20040029129A1  
; GENERAL INFORMATION:  
; APPLICANT: Wang, Liangsu  
; APPLICANT: Zamudio, Carlos  
; APPLICANT: Malone, Cheryl  
; APPLICANT: Haselbeck, Robert  
; APPLICANT: Ohlsen, Kari  
; APPLICANT: Zyskind, Judith  
; APPLICANT: Wall, Daniel  
; APPLICANT: Trawick, John  
; APPLICANT: Carr, Grant  
; APPLICANT: Yamamoto, Robert  
; APPLICANT: Forsyth, R.  
; APPLICANT: Xu, H.  
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
; FILE REFERENCE: ELITRA.034A  
; CURRENT APPLICATION NUMBER: US/10/282,122A  
; CURRENT FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: 60/191,078  
; PRIOR FILING DATE: 2000-03-21  
; PRIOR APPLICATION NUMBER: 60/206,848  
; PRIOR FILING DATE: 2000-05-23  
; PRIOR APPLICATION NUMBER: 60/207,727

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; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 26193
; LENGTH: 3288
; TYPE: DNA
; ORGANISM: Mycobacterium bovis
; US-10-282-122A-26193

Query Match      98.9%; Score 697.4; DB 17; Length 3288;
Best Local Similarity 99.9%; Pred. No. 3.9e-171;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB 971 CCCAGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCGGTGGTGC CGG 1030

QY 61 CGATCAAGAGTTCTTCGGCACCAGCAGCAGTGAAGCCAAATTCATGACAGACAACCCGC 120
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QY 121 TGTGGGGTTGACCCACAAGCGCGACTGTGCGCGCTGGGGCCCGCGGTCTGTACGCG 180
DB 1091 TGTGGGGTTGACCCACAAGCGCGACTGTGCGCGCTGGGGCCCGCGGTCTGTACGCG 1150

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DB 1151 AGCGTCCGGGTGGAGGTCGCGACGTCGACCGTCGACCTACGCGCGGATGTCGCCGA 1210

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DB 1211 TCGAACCCTTGAAGGGCCCAACATCGTCTGATCGGCTCGCTGTGCTGCTGAGCGCGG 1270

QY 301 TCAACCCGTTCCGGTTTCATCGAAGCCGCTACCGCAAGGTGTCGACGCGGTGGTAGCG 360
DB 1271 TCAACCCGTTCCGGTTTCATCGAAGCCGCTACCGCAAGGTGTCGACGCGGTGGTAGCG 1330

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DB 1331 ACGAGATCGTGTACCTGACCGCGCAGAGAGACCGCCACGTCGTCGTCGTCGTCGTCGTC 1390

QY 421 CGCCGATCATCGGACGCTGCTTGTGTCAGCGCGCGCTGCTGTCGTCGTCGTCGTCGTCGTC 480
DB 1391 CGCCGATCATCGGACGCTGCTTGTGTCAGCGCGCGCTGCTGTCGTCGTCGTCGTCGTCGTC 1450

QY 481 GCGAGTGGAGTACGTGCTTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 540
DB 1451 GCGAGTGGAGTACGTGCTTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1510

QY 541 TGGTGTGCGTGGCCACCGCGATGATTTCCCTTCTGGAGCAGCAGCAGCAGCAGCAGCAGCAG 600
DB 1511 TGGTGTGCGTGGCCACCGCGATGATTTCCCTTCTGGAGCAGCAGCAGCAGCAGCAGCAGCAG 1570

QY 601 TCATGGGGCAACATGACAGCGCAGCGCGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
DB 1571 TCATGGGGCAACATGACAGCGCAGCGCGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1630

QY 661 TGGGACCCGGGATGAGCTGCGCGCGCGATCGACGCGG 699

```

```

DB 1631 TGGGACCCGGGATGAGCTGCGCGCGCGATCGACGCGG 1669

RESULT 4
US-09-712-363-30
; Sequence 30, Application US/09712363
; Patent No. US20020164588A1
; GENERAL INFORMATION:
; APPLICANT: Eisenberg, David
; APPLICANT: Rotstein, Sergio H.
; APPLICANT: Marcotte, Edward M.
; TITLE OF INVENTION: DETERMINING THE FUNCTIONS AND
; TITLE OF INVENTION: INTERACTIONS OF PROTEINS BY COMPARATIVE ANALYSIS
; FILE REFERENCE: 07419-032001
; CURRENT APPLICATION NUMBER: US/09/712,363
; CURRENT FILING DATE: 2000-11-13
; PRIOR APPLICATION NUMBER: PCT/US00/02246
; PRIOR FILING DATE: 2000-01-28
; PRIOR APPLICATION NUMBER: 60/179,531
; PRIOR FILING DATE: 2000-02-01
; PRIOR APPLICATION NUMBER: 60/117,844
; PRIOR FILING DATE: 1999-01-29
; PRIOR APPLICATION NUMBER: 60/118,206,
; PRIOR FILING DATE: 1999-02-01
; PRIOR APPLICATION NUMBER: 60/126,593
; PRIOR FILING DATE: 1999-03-26
; PRIOR APPLICATION NUMBER: 60/134,093
; PRIOR FILING DATE: 1999-05-14
; PRIOR APPLICATION NUMBER: 60/134,092
; PRIOR FILING DATE: 1999-05-14
; PRIOR APPLICATION NUMBER: 60/165,124
; PRIOR FILING DATE: 1999-11-12
; PRIOR APPLICATION NUMBER: 60/165,086
; PRIOR FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PaetSeq for Windows Version 4.0
; SEQ ID NO 30
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; US-09-712-363-30

Query Match      98.9%; Score 697.4; DB 9; Length 3519;
Best Local Similarity 99.9%; Pred. No. 3.9e-171;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCGGTGGTGC CGG 60
DB 1199 CCCAGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCGGTGGTGC CGG 1258

QY 61 CGATCAAGAGTTCTTCGGCACCAGCAGCAGTGAAGCCAAATTCATGGAACAGACCCGC 120
DB 1259 CGATCAAGAGTTCTTCGGCACCAGCAGCAGTGAAGCCAAATTCATGGAACAGACCCGC 1318

QY 121 TGTGGGGTTGACCCACAAGCGCGACTGTGCGCGCTGGGGCCCGCGGTCTGTACGCTG 180
DB 1319 TGTGGGGTTGACCCACAAGCGCGACTGTGCGCGCTGGGGCCCGCGGTCTGTACGCTG 1378

QY 181 AGCGTCCGGGTGGAGGTCGCGACGTCGCGACGTCGACCTACGCGCGGATGTCGCCGA 240
DB 1379 AGCGTCCGGGTGGAGGTCGCGACGTCGCGACGTCGACCTACGCGCGGATGTCGCCGA 1438

QY 241 TCGAACCCTTGAAGGGCCCAACATCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 300
DB 1439 TCGAACCCTTGAAGGGCCCAACATCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1498

QY 301 TCAACCCGTTCCGGTTTCATCGAAGCCGCTGACCGCAAGGTGTCACGCGCGGTGGTAGCG 360
DB 1499 TCAACCCGTTCCGGTTTCATCGAAGCCGCTGACCGCAAGGTGTCACGCGCGGTGGTAGCG 1558

QY 361 ACGAGATCGTGTACCTGACCGCGCAGAGGAGCCGACGTCGTCGTCGTCGTCGTCGTCGTCG 420

```

Db 1559 ACAGATCGTGTAACCTGACCCGCGACGAGGAGCGCCACCGTGTGGCAAGGCCAATT 1618  
 Qy 421 CGCCGATCGATCGGACGCTCGCTTCGTGAGCGCGCTGTGTGTCGCGCGCAAGGCGG 480  
 Db 1619 CGCCGATCGATCGGACGCTCGCTTCGTGAGCGCGCTGTGTGTCGCGCGCAAGGCGG 1678  
 Qy 481 GCGAGTGGAGTACGTGCGCTCGTCTGAGGTGGAATACATGGAACGTCTGCGCCCGCCAGA 540  
 Db 1679 GCGAGTGGAGTACGTGCGCTCGTCTGAGGTGGAATACATGGAACGTCTGCGCCCGCCAGA 1738  
 Qy 541 TGGTGTGCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGCGCAACCGTGGCC 600  
 Db 1739 TGGTGTGCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGCGCAACCGTGGCC 1798  
 Qy 601 TCATGGGGGCAAAACATGACGCGCGAGCGGTGCGCTGCTGCTGAGGAGCGCGCGCTGG 660  
 Db 1799 TCATGGGGGCAAAACATGACGCGCGAGCGGTGCGCTGCTGCTGAGGAGCGCGCGCTGG 1858  
 Qy 661 TGGGCAACCGGGATGGAGCTGCGCGCGCGGATCGACGCG 699  
 Db 1859 TGGGCAACCGGGATGGAGCTGCGCGCGCGGATCGACGCG 1897

RESULT 5

US-10-282-122A-28230  
 ; Sequence 28230, Application US/10282122A  
 ; Publication No. US20040029129A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Wang, Liangsu  
 ; APPLICANT: Zamudio, Carlos  
 ; APPLICANT: Malone, Cheryl  
 ; APPLICANT: Haselbeck, Robert  
 ; APPLICANT: Ohlsen, Karl  
 ; APPLICANT: Zyskind, Judith  
 ; APPLICANT: Wall, Daniel  
 ; APPLICANT: Trawick, John  
 ; APPLICANT: Carr, Grant  
 ; APPLICANT: Yamamoto, Robert  
 ; APPLICANT: Forsyth, R.  
 ; APPLICANT: Xu, H.  
 ; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
 ; FILE REFERENCE: ELITRA.034A  
 ; CURRENT APPLICATION NUMBER: US/10/282,122A  
 ; CURRENT FILING DATE: 2003-02-20  
 ; PRIOR APPLICATION NUMBER: 60/191,078  
 ; PRIOR FILING DATE: 2000-03-21  
 ; PRIOR APPLICATION NUMBER: 60/206,848  
 ; PRIOR FILING DATE: 2000-05-23  
 ; PRIOR APPLICATION NUMBER: 60/207,727  
 ; PRIOR FILING DATE: 2000-05-26  
 ; PRIOR APPLICATION NUMBER: 60/230,335  
 ; PRIOR FILING DATE: 2000-09-06  
 ; PRIOR APPLICATION NUMBER: 60/230,347  
 ; PRIOR FILING DATE: 2000-09-09  
 ; PRIOR APPLICATION NUMBER: 60/242,578  
 ; PRIOR FILING DATE: 2000-10-23  
 ; PRIOR APPLICATION NUMBER: 60/253,625  
 ; PRIOR FILING DATE: 2000-11-27  
 ; PRIOR APPLICATION NUMBER: 60/257,931  
 ; PRIOR FILING DATE: 2000-12-22  
 ; PRIOR APPLICATION NUMBER: 60/267,636  
 ; PRIOR FILING DATE: 2001-02-09  
 ; PRIOR APPLICATION NUMBER: 60/269,308  
 ; PRIOR FILING DATE: 2001-02-16  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 78614  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 28230  
 ; LENGTH: 3519  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium tuberculosis  
 US-10-282-122A-28230

Query Match 98.9%; Score 697.4; DB 17; Length 3519;  
 Best Local Similarity 99.9%; Pred. No. 3.9e-171;  
 Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1 CCCAGGACGTGGAGGCGATCACACGCGAGAGCTTGATCAACATCCGCGCGGTGTCGCGG 60  
 Db 1199 CCCAGGACGTGGAGGCGATCACACGCGAGAGCTTGATCAACATCCGCGCGGTGTCGCGG 1258  
 Qy 61 CGATCAAGGAGTCTTCGCGCACGACCGAGTTCGCAATTCATGACACAGAACACCCGC 120  
 Db 1259 CGATCAAGGAGTCTTCGCGCACGACCGAGTTCGCAATTCATGACACAGAACACCCGC 1318  
 Qy 121 TGTGCGGGTTGACCCACAAGCGCGGCTGTGCGGGCTGGGGCCCGCGGTCTGTCAAGT 180  
 Db 1319 TGTGCGGGTTGACCCACAAGCGCGGCTGTGCGGGCTGGGGCCCGCGGTCTGTCAAGT 1378  
 Qy 181 AGCTGCGCGGCTGAGAGTCCGCGACGTGCAACCGTTCGCACTACGCGCGGATGTGCCGA 240  
 Db 1379 AGCTGCGCGGCTGAGAGTCCGCGACGTGCAACCGTTCGCACTACGCGCGGATGTGCCGA 1438  
 Qy 241 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGTGTCGCGCGGG 300  
 Db 1439 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGTGTCGCGCGGG 1498  
 Qy 301 TCAACCCGTTCCGGTTTCATCGAAACGCGGTACCGCAAGGTGTCGACGCGCTGTAGCG 360  
 Db 1499 TCAACCCGTTCCGGTTTCATCGAAACGCGGTACCGCAAGGTGTCGACGCGCTGTAGCG 1558  
 Qy 361 ACGAGATCGTGTACTGACCCCGACGAGGAGGACCGCACGTCGTGGTCGACAGGCCAATT 420  
 Db 1559 ACGAGATCGTGTACTGACCCCGACGAGGAGGACCGCACGTCGTGGTCGACAGGCCAATT 1618  
 Qy 421 CGCGCATCGATGCGGACGCTTCGTCGAGCGCGGCTGCTGTCGCGCGCAAGGCGG 480  
 Db 1619 CGCGCATCGATGCGGACGCTTCGTCGAGCGCGGCTGCTGTCGCGCGCAAGGCGG 1678  
 Qy 481 GCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGACTACATGGAAGTCTGCGCCCGCCAGA 540  
 Db 1679 GCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGACTACATGGAAGTCTGCGCCCGCCAGA 1738  
 Qy 541 TGGTGTGCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGCGCAACCGTGGCC 600  
 Db 1739 TGGTGTGCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGCGCAACCGTGGCC 1798  
 Qy 601 TCATGGGGGCAAAACATGACGCGCGCGGTGCGCTGCTGAGGAGCGCGCGGTGTCGCGG 660  
 Db 1799 TCATGGGGGCAAAACATGACGCGCGCGGTGCGCTGCTGAGGAGCGCGCGGTGTCGCGG 1858  
 Qy 661 TGGGCAACCGGGATGGAGCTGCGCGCGCGGATCGACGCGG 699  
 Db 1859 TGGGCAACCGGGATGGAGCTGCGCGCGCGGATCGACGCGG 1897  
 RESULT 6  
 US-09-285-306-29  
 ; Sequence 29, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gieras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 29  
 ; LENGTH: 687  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium bovis

US-09-285-306-29

Query Match 97.4%; Score 687; DB 9; Length 687;  
Best Local Similarity 100.0%; Pred. No. 2e-168;  
Matches 687; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 GGAGGCGATCACACCGACAGCTTGATCAACATCCGCGCGGTGGTCCGCGCATCAAGGA 70  
Db 1 GGAGGCGATCACACCGACAGCTTGATCAACATCCGCGCGGTGGTCCGCGCATCAAGGA 60  
QY 71 GTTCTTTCGGCACCAGCGAGCTGAGCCAAATTCATGACACAGAAACAACCCGCTGTTCGGGGTT 130  
Db 61 GTTCTTTCGGCACCAGCGAGCTGAGCCAAATTCATGACACAGAAACAACCCGCTGTTCGGGGTT 120  
QY 131 GACCCACAAGCGCCGATGTTCGGCGCTTGGGGCCCGCGGTCTGTCTACAGTACGAGTCCCGG 190  
Db 121 GACCCACAAGCGCGAGCTGTTCGGCGCTTGGGGCCCGCGGTCTGTCTACAGTACGAGTCCCGG 180  
QY 191 GCTGGAGGTCGCGAGCTGCACCCGTCGCACTACGCGCGGATGTGCGCATCGAAACCCC 250  
Db 181 GCTGGAGGTCGCGAGCTGCACCCGTCGCACTACGCGCGGATGTGCGCATCGAAACCCC 240  
QY 251 TGAGGGGCCCAAATCGGCTCTGATCGGCTCGCTGTTCGGGTGATCGCGCGGTCAACCCGTT 310  
Db 241 TGAGGGGCCCAAATCGGCTCTGATCGGCTCGCTGTTCGGGTGATCGCGCGGTCAACCCGTT 300  
QY 311 CGGGTTTCATCGAAACCGCGTACCGCAAGGTGTCGACCGCGGTGTTAGCGACGAGATCGT 370  
Db 301 CGGGTTTCATCGAAACCGCGTACCGCAAGGTGTCGACCGCGGTGTTAGCGACGAGATCGT 360  
QY 371 GTACCTGACCGCGAGGAGGACCGCCAGCTGTTGGCACAGGCCAAATTCGCCGATCGA 430  
Db 361 GTACCTGACCGCGAGGAGGACCGCCAGCTGTTGGCACAGGCCAAATTCGCCGATCGA 420  
QY 431 TGCGGACGGTTCGCTTCGAGCGCGCGTGTGTCGCGCGCAAGCGCGGCGAGGTGA 490  
Db 421 TGCGGACGGTTCGCTTCGAGCGCGCGTGTGTCGCGCGCAAGCGCGGCGAGGTGA 480  
QY 491 GTACGTGCCCTCTGTGAGGTGACTACATGACGCTCTCGCCCGCGCAGATGTCGCT 550  
Db 481 GTACGTGCCCTCTGTGAGGTGACTACATGACGCTCTCGCCCGCGCAGATGTCGCT 540  
QY 551 GGCCACCGCGATGATTCCTTCTGGAGCACGACGAGCCGACCGTCCCTCATGGGGC 610  
Db 541 GGCCACCGCGATGATTCCTTCTGGAGCACGACGAGCCGACCGTCCCTCATGGGGC 600  
QY 611 AAACATGACGCGCAGCGGTGCGCTGTTCGTTAGCGAGCCCGCTGTGTGGCACCGG 670  
Db 601 AAACATGACGCGCAGCGGTGCGCTGTTCGTTAGCGAGCCCGCTGTGTGGCACCGG 660  
QY 671 GATGGAGCTGCGCGCGCGGATCGAGCG 697  
Db 661 GATGGAGCTGCGCGCGCGGATCGAGCG 687

RESULT 7

US-09-285-306-181  
; Sequence 181, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 181  
; LENGTH: 705

; TYPE: DNA  
; ORGANISM: Mycobacterium sp. unique MAC#4  
US-09-285-306-181

Query Match 88.0%; Score 620.2; DB 9; Length 705;  
Best Local Similarity 92.5%; Pred. No. 4.1e-151;  
Matches 652; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGGCGATCACACCGCAGACGTTGATCAACATCCGCGCGGTGGTCCGCG 60  
Db 1 CCCAGAGCTGAGGCGATCACACCGCAGACGTTGATCAACATCCGCGCGGTGGTCCGCG 60  
QY 61 CGATCAAGGAGTTCTTCGGCACCCAGCGAGCTGCGAGTTTCATGACCAAGAACACCCCG 120  
Db 61 CGATCAAGGAGTTCTTCGGCACCCAGCGAGCTGCGAGTTTCATGACCAAGAACACCCCG 120  
QY 121 TGTTCGGGGTTGACCCACCAAGCGCGACTGTTCGGCGCTGGGGCCCGCGGTCTGTACAGTG 180  
Db 121 TGTTCGGGGCTGACCCACAAGCGCGCTGTTCGGCGCTGGGGCCCGCGGTCTGTCCGTTG 180  
QY 181 AGCGTTCGGGGTTCGAGGTTCGCGACCGCTGCGACTTACCGGCGGATGTGCCCGA 240  
Db 181 AGCGGCGCGGCTTCGAGGTTCGCGACCGCTGCGACTTACCGGCGGATGTGCCCGA 240  
QY 241 TCGAAACCCCTGAGGGGCCCAACATCGGCTCTGATCGGCTCGCTGTTCGGTGTACGCGCG 300  
Db 241 TCGAAGCCCGGAGGTTCGAAACATCGGCTCTGATCGGCTCGCTGTTCGGTGTACGCGAG 300  
QY 301 TCACACCCGTTTCGGGTTTCATCGAAACCGCGTACCGAAGGTGTCGACGCGGTGGTTAGCG 360  
Db 301 TCACACCCGTTTCGGCTTCATCGAGACCGCTACCGCAAGGTGTCGACGCGGTGGTTAGCG 360  
QY 361 ACAGATCGTGTACTGACCCGCGCAGAGGAGGACCGCCACGTCGTGTGGCAGAGCCAAAT 420  
Db 361 ACAGATCGTGTACTGACCCGCGCAGAGGAGGACCGCCACGTCGTGTGGCAGAGCCAAAT 420  
QY 421 CGCCGATCGATGCGGACCGCTTCGTCGAGCGCGCGTTCGTCGAGCGCGCGTTCGTCGCG 480  
Db 421 CGCCGATCGATGCGGACCGCTTCGTCGAGCGCGCGTTCGTCGAGCGCGCGTTCGTCGCG 480  
QY 481 GCGAGGTGAGTACCTGCGCTTCGTCGAGGTGGAATACATGAGACGCTCTCGCCCGCGCAGA 540  
Db 481 GCGAGGTGAGTACCTGCGCTTCGTCGAGGTGGAATACATGAGACGCTCTCGCCCGCGCAGA 540  
QY 541 TGGTTCGCTGCGTACCGCGATGATTCCTTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600  
Db 541 TGGTTCGCTGCGTACCGCGATGATTCCTTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600  
QY 601 TCATGGGGGCAACATGACGCGCAGGCGGTGCGCTGTTCGTTAGCGAGGCGCGCTGG 660  
Db 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCGCTGTGCGCAGCGAGCGCGCTGG 660  
QY 661 TGGGCACCGGATGAGCTGCGCGCGCGGATCGACGCGCGGACGT 705  
Db 661 TGGGCACCGGATGAGCTGCGCGCGCGGATCGACGCGCGGACGT 705

RESULT 8

US-09-940-925A-135  
; Sequence 135, Application US/09940925A  
; Publication No. US20030054338A1  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; APPLICANT: LYAMICHEV, VICTOR I.  
; APPLICANT: OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; NUMBER OF SEQUENCES: 165  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA

```

; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-940-925A-135

Query Match      87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 4.6e-151;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAATCCGGCCGGTGTGTCGCCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 95
DB 1 ATCAATCCGGCCGGTGTGTCGCCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 60
QY 96 CAATTCATGGACAGAACAAACCCGTCGCGGTTGACCCCAAGCGCGGACTGTCGGCG 155
DB 61 CAATTCATGGACAGAACAAACCCGTCGCGGTTGACCCCAAGCGCGGACTGTCGGCG 120
QY 156 CTGGGGCCCGCGGCTGTGTCAGTGAGCGTGC CGGGTGGAGTCCGGAAGTGCACCCG 215
DB 121 CTGGGGCCCGCGGCTGTGTCAGTGAGCGTGC CGGGTGGAGTCCGGAAGTGCACCCG 180
QY 216 TCGCTACTAGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 275
DB 181 TCGCTACTAGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240
QY 276 GCGTCGCTGTGCGGTGTACGCGCGGTTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 335
DB 241 GCGTCGCTGTGCGGTGTACGCGCGGTTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 300
QY 336 AAGGTGTGTCAGCGCGTGTAGCAGCAGATCGTGTACCTGACCGCCGACGAGGAGGAC 395
DB 301 AAGGTGTGTCAGCGCGTGTAGCAGCAGATCGTGTACCTGACCGCCGACGAGGAGGAC 360
QY 396 GCGCACGTGTGCGCAGCGCAATTCGCCGATCGATGCGGAGCGGTCGCTTCGTCGAGCGG 455
DB 361 GCGCACGTGTGCGCAGCGCAATTCGCCGATCGATGCGGAGCGGTCGCTTCGTCGAGCGG 420
QY 456 GCGCTGCTGTCGCGCGCAAGCGCGGAGGTGGAGTACGTGCCCTCGTCTGAGTGGAC 515
DB 421 GCGCTGCTGTCGCGCGCAAGCGCGGAGGTGGAGTACGTGCCCTCGTCTGAGTGGAC 480
QY 516 TACATGGAGCTGTCGCCCGCCAGATGTTGTCGGTGGCCACCGCGATGATTCCTTCCTG 575
DB 481 TACATGGAGCTGTCGCCCGCCAGATGTTGTCGGTGGCCACCGCGATGATTCCTTCCTG 540
QY 576 GAGCAGCAGCAGCCAAACCGTCCCTCATGCGGGGCAAAACATGACGCGCGGTCGCG 635
DB 541 GAGCAGCAGCAGCCAAACCGTCCCTCATGCGGGGCAAAACATGACGCGCGGTCGCG 600
QY 636 CTGGTCCGTAGCGAGGCCCC 655
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DB 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 9
US-09-940-925A-138/c
; Sequence 138, Application US/09940925A
; Publication No. US20030054338A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-940-925A-138

Query Match      87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 4.6e-151;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAATCCGGCCGGTGTGTCGCCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 95
DB 620 ATCAATCCGGCCGGTGTGTCGCCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 561
QY 96 CAATTCATGGACAGAACAAACCCGTCGCGGTTGACCCCAAGCGCGGACTGTCGGCG 155
DB 560 CAATTCATGGACAGAACAAACCCGTCGCGGTTGACCCCAAGCGCGGACTGTCGGCG 501
QY 156 CTGGGGCCCGCGGCTGTGTCACGTGAGCGTGC CGGGTGGAGGTCGCGACGTCGACCCG 215
DB 500 CTGGGGCCCGCGGCTGTGTCACGTGAGCGTGC CGGGTGGAGGTCGCGACGTCGACCCG 441
QY 216 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 275
DB 440 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381
QY 276 GCGTCGCTGTGCGGTGTACGCGCGGTCGAAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 335
DB 380 GCGTCGCTGTGCGGTGTACGCGCGGTCGAAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 321
QY 336 AAGGTGTGTCAGCGCGGTTGAGCGAGATCGTGTACCTGACCGCGCGAGGAGGAC 395
```



Db 320 AGGTGTCAGCGCGTGTGTACGACGAGATCGTGTACTGACCCCGACGAGGAGC 261  
QY 396 CGCCACGTGTGTGTCAGCAGCGCAATTCGCGATCGATCGGACCGTCTGCTCGAGCGC 455  
Db 260 CGCCACGTGTGTGTCAGCAGCGCAATTCGCGATCGATCGGACCGTCTGCTCGAGCGC 201  
QY 456 CGCGTCTGTGTCGCGCGCAGGCGGCGAGGTGGAGTGTGCTGCTGAGGTGGAC 515  
Db 200 CGCGTCTGTGTCGCGCGCAGGCGGCGAGGTGGAGTGTGCTGCTGAGGTGGAC 141  
QY 516 TACATGAGAGTCTGCGCGCGCGCGAGGTGTGCTGCGTGGCCACCGCGATGATTCCTTCCTG 575  
Db 140 TACATGAGAGTCTGCGCGCGCGCGAGGTGTGCTGCGTGGCCACCGCGATGATTCCTTCCTG 81  
QY 576 GAGCAGCAGCAGCGCCCAACCGTGTGCTCATGCGGCGCAAAATGCGAGCGCGGTGCGC 635  
Db 80 GAGCAGCAGCAGCGCCCAACCGTGTGCTCATGCGGCGCAAAATGCGAGCGCGGTGCGC 21  
QY 636 CTGGTCCGTAGCGAGGCCCC 655  
Db 20 CTGGTCCGTAGCGAGGCCCC 1

## RESULT 10

US-09-941-193A-135

; Sequence 135, Application US/09941193A

; Publication No. US20030108873A1

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN &amp; CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/941,193A

; FILING DATE: 28-Aug-2001

; CLASSIFICATION: &lt;Unknown&gt;

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-941-193A-135

Query Match

Best Local Similarity 100.0%; Score 620; DB 10; Length 620;

Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGGCGGTGTGCGCGCGATCAAGGAGTTCTTGGCACCGAGCGGTGAGC 95

Db 1 ATCAACATCCGGCGGTGTGCGCGCGATCAAGGAGTTCTTGGCACCGAGCGGTGAGC 60  
QY 96 CAATTATCGAGCAGAAACAACCGCTGTGCGGGTTTGACCCACAAGCGCGACTGTGCGGC 155  
Db 61 CAATTATCGAGCAGAAACAACCGCTGTGCGGGTTTGACCCACAAGCGCGACTGTGCGGC 120  
QY 156 CTGGGGCGCGGGTCTGTCACTGAGCGTGTGCGGGTGTGAGGTGCGCGACGTGACCCG 215  
Db 121 CTGGGGCGCGGGTCTGTCACTGAGCGTGTGCGGGTGTGAGGTGCGCGACGTGACCCG 180  
QY 216 TCGCACTACGCGCGGATGTGCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGCGCGGATGTGCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
QY 276 GCGTCGTGTGCGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCGGTACCGC 335  
Db 241 GCGTCGTGTGCGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCGGTACCGC 300  
QY 336 AAGGTGCGTGTGCGCGGTGTAGCAGCGATCGTGTACCTGACCGCGCGAGGAGGAC 395  
Db 301 AAGGTGCGTGTGCGCGGTGTAGCAGCGATCGTGTACCTGACCGCGCGAGGAGGAC 360  
QY 396 CGCCACGTGTGCGCACAGCGCAATTCGCGATCGATGCGGCGGTTCGTTTCGTCGAGCGC 455  
Db 361 CGCCACGTGTGCGCACAGCGCAATTCGCGATCGATGCGGCGGTTCGTTTCGTCGAGCGC 420  
QY 456 CGCGTGTGCGTGTGCGCGCAAGCGCGCGAGGTGAGTAGTGTGCGTGTGAGGTGAGC 515  
Db 421 CGCGTGTGCGTGTGCGCGCAAGCGCGCGAGGTGAGTAGTGTGCGTGTGAGGTGAGC 480  
QY 516 TACATGAGAGTCTGCGCGCGCGCGAGTGTGTCGTTGCGGCGCACCGCGATGATTCCTTCCTG 575  
Db 481 TACATGAGAGTCTGCGCGCGCGCGAGTGTGTCGTTGCGGCGCACCGCGATGATTCCTTCCTG 540  
QY 576 GAGCAGCAGCAGCGCAACCGTGTGCGTGTGCGGCGCAACATCGAGCGCGGTGCGC 635  
Db 541 GAGCAGCAGCAGCGCAACCGTGTGCGTGTGCGGCGCAACATCGAGCGCGGTGCGC 600  
QY 636 CTGGTCCGTAGCGAGGCCCC 655  
Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11  
US-09-941-193A-138/c  
; Sequence 138, Application US/09941193A  
; Publication No. US20030108873A1  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; LYAMICHEV, VICTOR I.  
; OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; PATHOGENS  
; NUMBER OF SEQUENCES: 165  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/941,193A  
; FILING DATE: 28-Aug-2001  
; CLASSIFICATION: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:  
US-09-941-193A-135

Query Match 87.9%; Score 620; DB 10; Length 620;  
Best Local Similarity 100.0%; Pred. No. 4.6e-151;  
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

REGISTRATION NUMBER: 32,837  
REFERENCE/DOCKET NUMBER: FORS-01756  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 138:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 620 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
SEQUENCE DESCRIPTION: SEQ ID NO: 138:  
US-09-941-193A-138

Query Match 87.9%; Score 620; DB 10; Length 620;  
Best Local Similarity 100.0%; Pred. No. 4.6e-151;  
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 36 ATCAACATCCGCGCGGTGTCGCCGATCAAGGAGTTCTTCGGCACAGCCAGCTGAGC 95  
DB 620 ATCAACATCCGCGCGGTGTCGCCGATCAAGGAGTTCTTCGGCACAGCCAGCTGAGC 561  
QY 96 CAATTATGACGACAGAAACAACCGCTGTGCGGGTTGACCCAAAGCGCGACTGTGCGG 155  
DB 560 CAATTATGACGACAGAAACAACCGCTGTGCGGGTTGACCCAAAGCGCGACTGTGCGG 501  
QY 156 CTGGGGCCCGGGTCTGTCAGTCAGCGGTGCGGGCTGGAGTCCGCGAGTGCACCGG 215  
DB 500 CTGGGGCCCGGGTCTGTCAGTCAGCGGTGCGGGCTGGAGTCCGCGAGTGCACCGG 441  
QY 216 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275  
DB 440 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381  
QY 276 GGCTCGCTGTCGGTGTACCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACCGCGTACCGC 335  
DB 380 GGCTCGCTGTCGGTGTACCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACCGCGTACCGC 321  
QY 336 AAGGTGGTTCAGCGGTGTAGCAGCAGATCGTGTACCTGACCGCGAGGAGGAC 395  
DB 320 AAGGTGGTTCAGCGGTGTAGCAGCAGATCGTGTACCTGACCGCGAGGAGGAC 261  
QY 396 CGCCACGTGGTGACAGCCAAATTCGCCGATCGATGCGGAGTGGTTCGTTCGAGCGG 455  
DB 260 CGCCACGTGGTGACAGCCAAATTCGCCGATCGATGCGGAGTGGTTCGTTCGAGCGG 201  
QY 456 CGCGTGTGTTCCGCGCAGCGCGGAGGTGGAGTACGTGCCCTTCGTCTGAGTGGAC 515  
DB 200 CGCGTGTGTTCCGCGCAGCGCGGAGGTGGAGTACGTGCCCTTCGTCTGAGTGGAC 141  
QY 516 TACATGGAGCTTCGCGCGCCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 575  
DB 140 TACATGGAGCTTCGCGCGCCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 81  
QY 576 GAGCAGCAGCAGCCAAACCGTCCCTCATGCGGGGCAACATGACGGCGAGCGGTGCGG 635  
DB 80 GAGCAGCAGCAGCCAAACCGTCCCTCATGCGGGGCAACATGACGGCGAGCGGTGCGG 21  
QY 636 CTGGTCCGTAGGAGGCCCC 655  
DB 20 CTGGTCCGTAGGAGGCCCC 1

RESULT 12  
US-10-409-594-135  
Sequence 135, Application US/10409594  
Publication No. US20050158716A1  
GENERAL INFORMATION:  
APPLICANT: BROW, MARY ANN D.  
LYAMICHEV, VICTOR I.  
OLIVE, DAVID M.  
TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

PATHOGENS  
NUMBER OF SEQUENCES: 165  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MEDLEN & CARROLL  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA  
COUNTRY: UNITED STATES OF AMERICA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/409,594  
FILING DATE: 08-Apr-2003  
CLASSIFICATION: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: CARROLL, PETER G.  
REGISTRATION NUMBER: 32,837  
REFERENCE/DOCKET NUMBER: FORS-01756  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 135:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 620 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
SEQUENCE DESCRIPTION: SEQ ID NO: 135:  
US-10-409-594-135

Query Match 87.9%; Score 620; DB 22; Length 620;  
Best Local Similarity 100.0%; Pred. No. 4.6e-151;  
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 36 ATCAACATCCGCGCGGTGTCGCCGATCAAGGAGTTCTTCGGCACAGCCAGCTGAGC 95  
DB 1 ATCAACATCCGCGCGGTGTCGCCGATCAAGGAGTTCTTCGGCACAGCCAGCTGAGC 60  
QY 96 CAATTATGACGACAGAAACAACCGCTGTGCGGGTTGACCCAAAGCGCGACTGTGCGG 155  
DB 61 CAATTATGACGACAGAAACAACCGCTGTGCGGGTTGACCCAAAGCGCGACTGTGCGG 120  
QY 156 CTGGGGCCCGCGGTCTGTCACTGAGCGTCCCGGGCTGGAGGTCCGCGAAGTGCACCG 215  
DB 121 CTGGGGCCCGCGGTCTGTCACTGAGCGTCCCGGGCTGGAGGTCCGCGAAGTGCACCG 180  
QY 216 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275  
DB 181 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
QY 276 GGCTCGCTGTCGGTGTACGCGGGTCAACCCGTTTCGGGTTTCATCGAAACCGCGTACCGC 335  
DB 241 GGCTCGCTGTCGGTGTACGCGGGTCAACCCGTTTCGGGTTTCATCGAAACCGCGTACCGC 300  
QY 336 AAGGTGGTTCAGCGGTGTAGCGAAGATCGTGTACCTGACCGCGAGGAGGAGAC 395  
DB 301 AAGGTGGTTCAGCGGTGTAGCGAAGATCGTGTACCTGACCGCGAGGAGGAGAC 360  
QY 396 CGCCACGTGGTGACAGCCAAATTCGCCGATCGATGCGGAGTGGTTCGTTCGAGCGG 455  
DB 361 CGCCACGTGGTGACAGCCAAATTCGCCGATCGATGCGGAGTGGTTCGTTCGAGCGG 420  
QY 456 CGCGTGTGTTCCGCGCAGCGCGGAGGTGGAGTACGTGCCCTTCGTCTGAGTGGAC 515  
DB 421 CGCGTGTGTTCCGCGCAGCGCGGAGGTGGAGTACGTGCCCTTCGTCTGAGTGGAC 480  
QY 516 TACATGGAGCTTCGCGCGCCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 575

Db 481 TACATGACGTCTCGCCCGCCAGATGTTCTCGTGGCCACCGCGATGATTCCTTCCTG 540  
QY 576 GAGCAGACAGACCCCAACCGTGCCTCATGCGGGGCAAAACATGACGAGCCGAGCGGTGCGG 635  
Db 541 GAGCAGACAGACCCCAACCGTGCCTCATGCGGGGCAAAACATGACGAGCCGAGCGGTGCGG 600  
QY 636 CTGGTCCGTAGCGAGGCCCC 655  
Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 13  
US-10-409-594-138/c  
; Sequence 138, Application US/10409594  
; Publication No. US20050158716A1  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; LYAMICHEV, VICTOR I.  
; OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; PATHOGENS  
; NUMBER OF SEQUENCES: 165  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/409,594  
; FILING DATE: 08-Apr-2003  
; CLASSIFICATION: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:  
US-10-409-594-138

Query Match 87.9%; Score 620; DB 22; Length 620;  
Best Local Similarity 100.0%; Pred. No. 4.6e-151;  
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGTGTGCGCGCATCAAGGAGTCTTCGGACACAGCCAGCGTGAGC 95  
Db 620 ATCAACATCCGCGCGTGTGCGCGCATCAAGGAGTCTTCGGACACAGCCAGCGTGAGC 561  
QY 96 CAATTTCATGACAGCAACCCGCTGTGCGGGGTTGACCCCAAGCGCGGACTGTGCGG 155  
Db 560 CAATTTCATGACAGCAACCCGCTGTGCGGGGTTGACCCCAAGCGCGGACTGTGCGG 501  
QY 156 CTGGGGCCCGGGGTCTGTACGTGAGCGTGCCTGGGCTGGAGTCCGCGACGTGACCCG 215  
Db 500 CTGGGGCCCGGGGTCTGTACGTGAGCGTGCCTGGGCTGGAGTCCGCGACGTGACCCG 441  
QY 216 TCGCACTACGCGCGATGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCGTGATC 275

Db 440 TCGCACTACGCGCGATGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCGTGATC 381  
QY 276 GCGTCGCTGTGCGTGTAGCGCGGCGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGC 335  
Db 380 GCGTCGCTGTGCGTGTAGCGCGGCGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGC 321  
QY 336 AAGGTGCTGCGAGCGGCGTGTAGCGACGAGATCGGTACCTGACCGCGACGAGGAGGAC 395  
Db 320 AAGGTGCTGCGAGCGGCGTGTAGCGACGAGATCGGTACCTGACCGCGACGAGGAGGAC 261  
QY 396 CGCCACGCTGGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGCGTCCGTCGAGCCG 455  
Db 260 CGCCACGCTGGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGCGTCCGTCGAGCCG 201  
QY 456 CGCGTGTGCTCCGCGCAAGCGCGGCGAGGTGAGTAGTACGTCCCTCTGCTGAGGTGGAC 515  
Db 200 CGCGTGTGCTCCGCGCAAGCGCGGCGAGGTGAGTAGTACGTCCCTCTGCTGAGGTGGAC 141  
QY 516 TACATGGACGCTCTCGCCCGCCAGATGTTGCGTGGCCACCGCGATGATTCCTTCCTG 575  
Db 140 TACATGGACGCTCTCGCCCGCCAGATGTTGCGTGGCCACCGCGATGATTCCTTCCTG 81  
QY 576 GAGCAGACGACGCCCAACCGTGCCTCATGCGGGGCAAAACATGACGAGCCGAGCGTGCCG 635  
Db 80 GAGCAGACGACGCCCAACCGTGCCTCATGCGGGGCAAAACATGACGAGCCGAGCGTGCCG 21  
QY 636 CTGGTCCGTAGCGAGGCCCC 655  
Db 20 CTGGTCCGTAGCGAGGCCCC 1

RESULT 14  
US-09-940-925A-136  
; Sequence 136, Application US/09940925A  
; Publication No. US20030054338A1  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; LYAMICHEV, VICTOR I.  
; OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; PATHOGENS  
; NUMBER OF SEQUENCES: 165  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/940,925A  
; FILING DATE: 10-Jun-2002  
; CLASSIFICATION: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 136:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 136:

US-09-940-925A-136

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Query Match      87.7%; Score 618.4; DB 10; Length 620;
Best Local Similarity 99.8%; Pred. No. 1.2e-150;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 36 ATCAACATCCGGCGGTGTGTCGCGCATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 95
D 1 ATCAACATCCGGCGGTGTGTCGCGCATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 60

QY 96 CAATTCATGACACAGAAACAACCCGCTGTGCGGTTGACCCACAAGCGCGCATGTGCGG 155
D 61 CAATTCATGACACAGAAACAACCCGCTGTGCGGTTGACCCACAAGCGCGCATGTGCGG 120

QY 156 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGGTCCGCGAGTGCACCG 215
D 121 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGGTCCGCGAGTGCACCG 180

QY 216 TCGCACTACGGCCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 275
D 181 TCGCACTACGGCCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240

QY 276 GCGTCGCTGCTGCTACCGCGGGTCAACCCGTTGCGGTTTCATCGAAACCGCGTACCG 335
D 241 GCGTCGCTGCTGCTACCGCGGGTCAACCCGTTGCGGTTTCATCGAAACCGCGTACCG 300

QY 336 AAGGTGGTCGACGGCGTGTGAGCAGCAGATCGTGTAACCTGACCGCGACGAGGAGAC 395
D 301 AAGGTGGTCGACGGCGTGTGAGCAGCAGATCGTGTAACCTGACCGCGACGAGGAGAC 360

QY 396 CGCCACGTGGTGACAGCCCAATTCGCGCATCGATGCGGACGCGTCTGTCGAGCGG 455
D 361 CGCCACGTGGTGACAGCCCAATTCGCGCATCGATGCGGACGCGTCTGTCGAGCGG 420

QY 456 CGCGTGTGCTGCTGCGCGGAGCGGCGAGGTGAGTACGTCCTCTGTCGAGTGGAC 515
D 421 CGCGTGTGCTGCTGCGCGGAGCGGCGAGGTGAGTACGTCCTCTGTCGAGTGGAC 480

QY 516 TACATGGAGCTGTCCGCCCGCAGATGTGTCGTTGGCCACCGCATGATTCCTTCCTG 575
D 481 TACATGGAGCTGTCCGCCCGCAGATGTGTCGTTGGCCACCGCATGATTCCTTCCTG 540

QY 576 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAAAACATGACGCGCAGCGGTGCCG 635
D 541 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAAAACATGACGCGCAGCGGTGCCG 600

QY 636 CTGGTCCGTAGCGAGGCCCC 655
D 601 CTGGTCCGTAGCGAGGCCCC 620
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RESULT 15

US-09-940-925A-137

Sequence 137, Application US/09940925A

Publication No. US20030054338A1

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

LVAMICHEV, VICTOR I.

OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

PATHOGENS

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/940,925A

FILING DATE: 10-Jun-2002

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 137:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

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STRANDEDNESS: double

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MOLECULE TYPE: DNA (genomic)

SEQUENCE DESCRIPTION: SEQ ID NO: 137:

US-09-940-925A-137

Query Match 87.7%; Score 618.4; DB 10; Length 620;

Best Local Similarity 99.8%; Pred. No. 1.2e-150;

Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 36 ATCAACATCCGGCGGTGTGTCGCGCATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 95

D 1 ATCAACATCCGGCGGTGTGTCGCGCATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 60

QY 96 CAATTCATGACACAGAAACAACCCGCTGTGCGGTTGACCCACAAGCGCGCATGTGCGG 155

D 61 CAATTCATGACACAGAAACAACCCGCTGTGCGGTTGACCCACAAGCGCGCATGTGCGG 120

QY 156 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGGTCCGCGAGTGCACCG 215

D 121 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGGTCCGCGAGTGCACCG 180

QY 216 TCGCACTACGGCCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 275

D 181 TCGCACTACGGCCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240

QY 276 GCGTCGCTGCTGCTACCGCGGGTCAACCCGTTGCGGTTTCATCGAAACCGCGTACCG 335

D 241 GCGTCGCTGCTGCTACCGCGGGTCAACCCGTTGCGGTTTCATCGAAACCGCGTACCG 300

QY 336 AAGGTGGTCGACGGCGTGTGAGCAGCAGATCGTGTAACCTGACCGCGACGAGGAGAC 395

D 301 AAGGTGGTCGACGGCGTGTGAGCAGCAGATCGTGTAACCTGACCGCGACGAGGAGAC 360

QY 396 CGCCACGTGGTGACAGCCCAATTCGCGCATCGATGCGGACGCGTCTGTCGAGCGG 455

D 361 CGCCACGTGGTGACAGCCCAATTCGCGCATCGATGCGGACGCGTCTGTCGAGCGG 420

QY 456 CGCGTGTGCTGCTGCGCGGAGCGGCGAGGTGAGTACGTCCTCTGTCGAGTGGAC 515

D 421 CGCGTGTGCTGCTGCGCGGAGCGGCGAGGTGAGTACGTCCTCTGTCGAGTGGAC 480

QY 516 TACATGGAGCTGTCCGCCCGCAGATGTGTCGTTGGCCACCGCATGATTCCTTCCTG 575

D 481 TACATGGAGCTGTCCGCCCGCAGATGTGTCGTTGGCCACCGCATGATTCCTTCCTG 540

QY 576 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAAAACATGACGCGCAGCGGTGCCG 635

D 541 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAAAACATGACGCGCAGCGGTGCCG 600

QY 636 CTGGTCCGTAGCGAGGCCCC 655

D 601 CTGGTCCGTAGCGAGGCCCC 620

Search completed: August 25, 2005, 11:35:28

Job time : 453.661 secs

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Result No.	Score	Query #			ID	Description
		Match	Length	DB		
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2	705	100.0	705	9	US-09-285-306-5	Sequence 5, Appli
3	705	100.0	705	9	US-09-285-306-6	Sequence 6, Appli
4	705	100.0	705	9	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	9	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	9	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	9	US-09-285-306-12	Sequence 12, Appli

QY 61 CGATCAAGGAGTTCTTCGGCACACAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC 120  
Db |||||  
61 CGATCAAGGAGTTCTTCGGCACACAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC 120  
QY |||||  
121 TGTCCGGGCTCACCAAGAGCCCGCTGTGCGCGCTGGGCGGGTGTCTGTCCCGGG 180  
Db |||||  
121 TGTCCGGGCTCACCAAGAGCCCGCTGTGCGCGCTGGGCGGGTGTCTGTCCCGGG 180  
QY |||||  
181 AGCGGGCGGGTGTGAGGTTCGCGACGTGCACCCGTCCACTACGGCCGGATGTGCCCGA 240  
Db |||||  
181 AGCGGGCGGGTGTGAGGTTCGCGACGTGCACCCGTCCACTACGGCCGGATGTGCCCGA 240  
QY |||||  
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGATCGCGGG 300  
Db |||||  
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGATCGCGGG 300  
QY |||||  
301 TCAACCCGTTCCGGTTTCATCAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGTCAACG 360  
Db |||||  
301 TCAACCCGTTCCGGTTTCATCAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGTCAACG 360  
QY |||||  
361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420  
Db |||||  
361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420  
QY |||||  
421 CGCCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCCGGTCTGTTCGCCCGCAAGGCGG 480  
Db |||||  
421 CGCCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCCGGTCTGTTCGCCCGCAAGGCGG 480  
QY |||||  
481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTTCGCGCGCCAGA 540  
Db |||||  
481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTTCGCGCGCCAGA 540  
QY |||||  
541 TGGTGTCCGTTGGCCACCCCGATGATCCCGTTCTTCGAGCAGCAGACCCAAACCGTGCCC 600  
Db |||||  
541 TGGTGTCCGTTGGCCACCCCGATGATCCCGTTCTTCGAGCAGCAGACCCAAACCGTGCCC 600  
QY |||||  
601 TGATGGGCGCCAAACATGACAGCCAGCGGTTCCGCTGGTTCGAGCAGGCGCGCTGG 660  
Db |||||  
601 TGATGGGCGCCAAACATGACAGCCAGCGGTTCCGCTGGTTCGAGCAGGCGCGCTGG 660  
QY |||||  
661 TGGGACCGGATGAGAGTTCGCGCGCGCGATCGACGCGGCGACGT 705  
Db |||||  
661 TGGGACCGGATGAGAGTTCGCGCGCGCGATCGACGCGGCGACGT 705

RESULT 2  
US-09-285-306-5  
; Sequence 5, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 5  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-5  
Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCAGGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCATCGTGTGGCGG 60  
|||

Db 1 CCCAGGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCATCGTGTGGCGG 60  
QY |||||  
61 CGATCAAGGAGTTCTTCGGCACACAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC 120  
Db |||||  
61 CGATCAAGGAGTTCTTCGGCACACAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC 120  
QY |||||  
121 TGTCCGGGCTCACCAAGAGCCCGCTGTGCGCGCTGGGCGGGTGTCTGTCCCGGG 180  
Db |||||  
121 TGTCCGGGCTCACCAAGAGCCCGCTGTGCGCGCTGGGCGGGTGTCTGTCCCGGG 180  
QY |||||  
181 AGCGGGCGGGTGTGAGGTTCGCGACGTGCACCCGTCCACTACGGCCGGATGTGCCCGA 240  
Db |||||  
181 AGCGGGCGGGTGTGAGGTTCGCGACGTGCACCCGTCCACTACGGCCGGATGTGCCCGA 240  
QY |||||  
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGATCGCGGG 300  
Db |||||  
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGATCGCGGG 300  
QY |||||  
301 TCAACCCGTTCCGGTTTCATCAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGTCAACG 360  
Db |||||  
301 TCAACCCGTTCCGGTTTCATCAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGTCAACG 360  
QY |||||  
361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420  
Db |||||  
361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420  
QY |||||  
421 CGCCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCCGGTCTGTTCGCCCGCAAGGCGG 480  
Db |||||  
421 CGCCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCCGGTCTGTTCGCCCGCAAGGCGG 480  
QY |||||  
481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTTCGCGCGCCAGA 540  
Db |||||  
481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTTCGCGCGCCAGA 540  
QY |||||  
541 TGGTGTCCGTTGGCCACCCCGATGATCCCGTTCTTCGAGCAGCAGACCCAAACCGTGCCC 600  
Db |||||  
541 TGGTGTCCGTTGGCCACCCCGATGATCCCGTTCTTCGAGCAGCAGACCCAAACCGTGCCC 600  
QY |||||  
601 TGATGGGCGCCAAACATGACAGCCAGCGGTTCCGCTGGTTCGAGCAGGCGCGCTGG 660  
Db |||||  
601 TGATGGGCGCCAAACATGACAGCCAGCGGTTCCGCTGGTTCGAGCAGGCGCGCTGG 660  
QY |||||  
661 TGGGACCGGATGAGAGTTCGCGCGCGCGATCGACGCGGCGACGT 705  
Db |||||  
661 TGGGACCGGATGAGAGTTCGCGCGCGCGATCGACGCGGCGACGT 705

RESULT 3  
US-09-285-306-6  
; Sequence 6, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 6  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-6  
Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCAGGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCATCGTGTGGCGG 60  
|||



QY 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCTTGATCAACATCCGTCCAGTCTGGCGG 60  
 DB 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTTGATCAACATCCGTCCAGTCTGGCGG 60  
 QY 61 CGATCAAGGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCTATGGACAGAAACAACCCGC 120  
 DB 61 CGATCAAGGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCTATGGACAGAAACAACCCGC 120  
 QY 121 TGTCCGGGCTACCCACAAGCCCGGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGG 180  
 DB 121 TGTCCGGGCTACCCACAAGCCCGGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGG 180  
 QY 181 AGCGGGCCGGGCTGAGGTCCCGAGCTGCACCCGTCCACATPACCGCGGATGTCCCGA 240  
 DB 181 AGCGGGCCGGGCTGAGGTCCCGAGCTGCACCCGTCCACATPACCGCGGATGTCCCGA 240  
 QY 241 TCGAGACCCCGGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTATGCGCGG 300  
 DB 241 TCGAGACCCCGGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTATGCGCGG 300  
 QY 301 TCAACCCGTTCCGGTTCTAGAGACCGGTACCGCAAGGTGTGACCGGCTGTGTCACG 360  
 DB 301 TCAACCCGTTCCGGTTCTAGAGACCGGTACCGCAAGGTGTGACCGGCTGTGTCACG 360  
 QY 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGCGCCACGTGTGGCGAGGCCAACT 420  
 DB 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGCGCCACGTGTGGCGAGGCCAACT 420  
 QY 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTCTGGTCCGCGCAAGGCGG 480  
 DB 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTCTGGTCCGCGCAAGGCGG 480  
 QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGCCAGA 540  
 DB 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGCCAGA 540  
 QY 541 TGGTGTCCGTGCGCACCAGCGATGATCCGTTCTCGAGCAGACGACGCCACCGTGGCC 600  
 DB 541 TGGTGTCCGTGCGCACCAGCGATGATCCGTTCTCGAGCAGACGACGCCACCGTGGCC 600  
 QY 601 TGATGGGCGCCAAATGACGCGCCAGCGGTTCCGCTGTGGTGGCAGGAGCGCGCTGG 660  
 DB 601 TGATGGGCGCCAAATGACGCGCCAGCGGTTCCGCTGTGGTGGCAGGAGCGCGCTGG 660  
 QY 661 TGGGCACCGCATGAGCTGCGCGCGCGATCGAATCGACGCGCGACGT 705  
 DB 661 TGGGCACCGCATGAGCTGCGCGCGCGATCGAATCGACGCGCGACGT 705

RESULT 4

US-09-285-306-7  
 ; Sequence 7, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gengeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; EARLIER FILING DATE: 1999-04-02  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 7  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCTTGATCAACATCCGTCCAGTCTGGCGG 60  
 DB 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCTTGATCAACATCCGTCCAGTCTGGCGG 60  
 QY 61 CGATCAAGGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCTATGGACAGAAACAACCCGC 120  
 DB 61 CGATCAAGGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCTATGGACAGAAACAACCCGC 120  
 QY 121 TGTCCGGGCTACCCACAAGCCCGGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGG 180  
 DB 121 TGTCCGGGCTACCCACAAGCCCGGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGG 180  
 QY 181 AGCGGGCCGGGCTGAGGTCCCGAGCTGCACCCGTCCACATPACCGCGGATGTCCCGA 240  
 DB 181 AGCGGGCCGGGCTGAGGTCCCGAGCTGCACCCGTCCACATPACCGCGGATGTCCCGA 240  
 QY 241 TCGAGACCCCGGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTATGCGCGG 300  
 DB 241 TCGAGACCCCGGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTATGCGCGG 300  
 QY 301 TCAACCCGTTCCGGTTCTAGAGACCGGTACCGCAAGGTGTGACCGGCTGTGTCACG 360  
 DB 301 TCAACCCGTTCCGGTTCTAGAGACCGGTACCGCAAGGTGTGACCGGCTGTGTCACG 360  
 QY 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGCGCCACGTGTGGCGAGGCCAACT 420  
 DB 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGCGCCACGTGTGGCGAGGCCAACT 420  
 QY 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTCTGGTCCGCGCAAGGCGG 480  
 DB 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTCTGGTCCGCGCAAGGCGG 480  
 QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGCCAGA 540  
 DB 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGCCAGA 540  
 QY 541 TGGTGTCCGTGCGCACCAGCGATGATCCGTTCTCGAGCAGACGACGCCACCGTGGCC 600  
 DB 541 TGGTGTCCGTGCGCACCAGCGATGATCCGTTCTCGAGCAGACGACGCCACCGTGGCC 600  
 QY 601 TGATGGGCGCCAAATGACGCGCCAGCGGTTCCGCTGTGGTGGCAGGAGCGCGCTGG 660  
 DB 601 TGATGGGCGCCAAATGACGCGCCAGCGGTTCCGCTGTGGTGGCAGGAGCGCGCTGG 660  
 QY 661 TGGGCACCGCATGAGCTGCGCGCGCGATCGAATCGACGCGCGACGT 705  
 DB 661 TGGGCACCGCATGAGCTGCGCGCGCGATCGAATCGACGCGCGACGT 705

RESULT 5

US-09-285-306-8  
 ; Sequence 8, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gengeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; EARLIER FILING DATE: 1999-04-02  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 8  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-8

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTTCGTGGCGG 60  
Db 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTTCGTGGCGG 60

Qy 61 CGATCAAGAGGTTCTTCCGGCACCAAGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120  
Db 61 CGATCAAGAGGTTCTTCCGGCACCAAGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGGCTGGGCCCCGGTGGTCTGTCCCGGG 180  
Db 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGGCTGGGCCCCGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCCGGGCTGGAGTCCGACAGCTGTCAGTCCGCTCGCTGCGGTGTATGCGCGG 240  
Db 181 AGCGGGCCGGGCTGGAGTCCGACAGCTGTCAGTCCGCTCGCTGCGGTGTATGCGCGG 240

Qy 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCCGCTCGCTGCGGTGTATGCGCGG 300  
Db 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCCGCTCGCTGCGGTGTATGCGCGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGCAAGTGGTTCGACGCGGTGGTCAACG 360  
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGCAAGTGGTTCGACGCGGTGGTCAACG 360

Qy 361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTTGGTGGCGCAGGCCAACT 420  
Db 361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTTGGTGGCGCAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCGGTCTGTCGCCCGCAAGGCGG 480  
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCGGTCTGTCGCCCGCAAGGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTGCGCGGCCAGA 540  
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTGCGCGGCCAGA 540

Qy 541 TGGTGTCCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600  
Db 541 TGGTGTCCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600

Qy 601 TGATGGGGCCCAACATGACGCGCGGTTCCGCTCGTGGCAGCGAGCGCGCTGG 660  
Db 601 TGATGGGGCCCAACATGACGCGCGGTTCCGCTCGTGGCAGCGAGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705  
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705

RESULT 6  
US-09-285-306-9  
; Sequence 9, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; CURRENT APPLICATION NUMBER: US/09/285.306A  
; EARLIER APPLICATION NUMBER: US 60/080.616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 9  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium

US-09-285-306-9  
Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTTCGTGGCGG 60  
Db 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTTCGTGGCGG 60

Qy 61 CGATCAAGAGGTTCTTCCGGCACCAAGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120  
Db 61 CGATCAAGAGGTTCTTCCGGCACCAAGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGGCTGGGCCCCGGTGGTCTGTCCCGGG 180  
Db 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGGCTGGGCCCCGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCCGGGCTGGAGTCCGCGACGCTGTCAGTCCGCTCGCTGCGGTGTATGCGCGG 240  
Db 181 AGCGGGCCGGGCTGGAGTCCGCGACGCTGTCAGTCCGCTCGCTGCGGTGTATGCGCGG 240

Qy 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCCGCTCGCTGCGGTGTATGCGCGG 300  
Db 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCCGCTCGCTGCGGTGTATGCGCGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGCAAGTGGTTCGACGCGGTGGTCAACG 360  
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGCAAGTGGTTCGACGCGGTGGTCAACG 360

Qy 361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTTGGTGGCGCAGGCCAACT 420  
Db 361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTTGGTGGCGCAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCGGTCTGTCGCCCGCAAGGCGG 480  
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCGGTCTGTCGCCCGCAAGGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTGCGCGGCCAGA 540  
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTGCGCGGCCAGA 540

Qy 541 TGGTGTCCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600  
Db 541 TGGTGTCCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600

Qy 601 TGATGGGGCCCAACATGACGCGCGGTTCCGCTCGTGGCAGCGAGCGCGCTGG 660  
Db 601 TGATGGGGCCCAACATGACGCGCGGTTCCGCTCGTGGCAGCGAGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705  
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705

RESULT 7  
US-09-285-306-12  
; Sequence 12, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285.306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080.616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 12  
; LENGTH: 705

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; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGGCGATCACCGCAGACCCCTGATCAACATCCGTTCAGTCTGTGGCGG 60
DB 1 CCCAGAGCTGAGGCGATCACCGCAGACCCCTGATCAACATCCGTTCAGTCTGTGGCGG 60
QY 61 CGATCAAGAGATTCTTCGGCACCAGCAGCTGCTCCAGTTTCATGACACAGAACACCCGC 120
DB 61 CGATCAAGAGATTCTTCGGCACCAGCAGCTGCTCCAGTTTCATGACACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
DB 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 181 ACCGGCCCGGGTGGAGTCCCGAGCTGCACCCGTCCCACTACGGCCGGATGTCCCGGA 240
DB 181 ACCGGCCCGGGTGGAGTCCCGAGCTGCACCCGTCCCACTACGGCCGGATGTCCCGGA 240
QY 241 TCGAGACCCCGAGGCTCCAAATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGCGGG 300
DB 241 TCGAGACCCCGAGGCTCCAAATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGCGGG 300
QY 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCAGCGCGTCAAC 360
DB 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCAGCGCGTCAAC 360
QY 361 ACGAGATCCACTACTGACCGCGCAGAGGAGGACCGCCACGTGTGGCGCAGGCCAACT 420
DB 361 ACGAGATCCACTACTGACCGCGCAGAGGAGGACCGCCACGTGTGGCGCAGGCCAACT 420
QY 421 CGCCCATCGACACAAAGGCGCGGTTTCGGAGGCGCGGTTGTCGGTGTGTCAGAGGCGG 480
DB 421 CGCCCATCGACACAAAGGCGCGGTTTCGGAGGCGCGGTTGTCGGTGTGTCAGAGGCGG 480
QY 481 GCGAGTTCGAGTACGTCCTCGTCGAGGTGGAATACATGACAGCTGTGCGCGCGCCAGA 540
DB 481 GCGAGTTCGAGTACGTCCTCGTCGAGGTGGAATACATGACAGCTGTGCGCGCGCCAGA 540
QY 541 TGGTGTGGTGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGCCC 600
DB 541 TGGTGTGGTGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGCCC 600
QY 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGTCGAGCAGGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGTCGAGCAGGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGAGCGCGGACGCT 705
DB 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGAGCGCGGACGCT 705
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## RESULT 8

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US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
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; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGGCGATCACCGCAGACCCCTGATCAACATCCGTTCAGTCTGTGGCGG 60
DB 1 CCCAGAGCTGAGGCGATCACCGCAGACCCCTGATCAACATCCGTTCAGTCTGTGGCGG 60
QY 61 CGATCAAGAGATTCTTCGGCACCAGCAGCTGCTCCAGTTTCATGACACAGAACACCCGC 120
DB 61 CGATCAAGAGATTCTTCGGCACCAGCAGCTGCTCCAGTTTCATGACACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
DB 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 181 ACCGGCCCGGGTGGAGTCCCGAGCTGCACCCGTCCCACTACGGCCGGATGTCCCGGA 240
DB 181 ACCGGCCCGGGTGGAGTCCCGAGCTGCACCCGTCCCACTACGGCCGGATGTCCCGGA 240
QY 241 TCGAGACCCCGAGGCTCCAAATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGCGGG 300
DB 241 TCGAGACCCCGAGGCTCCAAATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGCGGG 300
QY 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCAGCGCGTCAAC 360
DB 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCAGCGCGTCAAC 360
QY 361 ACGAGATCCACTACTGACCGCGCAGAGGAGGACCGCCACGTGTGGCGCAGGCCAACT 420
DB 361 ACGAGATCCACTACTGACCGCGCAGAGGAGGACCGCCACGTGTGGCGCAGGCCAACT 420
QY 421 CGCCCATCGACACAAAGGCGCGGTTTCGGAGGCGCGGTTGTCGGTGTGTCAGAGGCGG 480
DB 421 CGCCCATCGACACAAAGGCGCGGTTTCGGAGGCGCGGTTGTCGGTGTGTCAGAGGCGG 480
QY 481 GCGAGTTCGAGTACGTCCTCGTCGAGGTGGAATACATGACAGCTGTGCGCGCGCCAGA 540
DB 481 GCGAGTTCGAGTACGTCCTCGTCGAGGTGGAATACATGACAGCTGTGCGCGCGCCAGA 540
QY 541 TGGTGTGGTGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGCCC 600
DB 541 TGGTGTGGTGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGCCC 600
QY 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGTCGAGCAGGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGTCGAGCAGGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGAGCGCGGACGCT 705
DB 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGAGCGCGGACGCT 705
```

## RESULT 9

```
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

```
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACACGACAGCCCTGTATCAACATCCGTCAGTCTGTGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACACGACAGCCCTGTATCAACATCCGTCAGTCTGTGCGG 60

Qy 61 CGATCAAGGAGTTCTTCGGACACAGCCAGCTGTCCAGTTTCATGGACCAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGACACAGCCAGCTGTCCAGTTTCATGGACCAACCCGC 120

Qy 121 TGTGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGG 180
Db 121 TGTGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGG 180

Qy 181 AGCGGCGGGCTGGAGTCCGCGACGTGCAACCCGTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGGGCTGGAGTCCGCGACGTGCAACCCGTCCCACTACGCGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGGG 300

Qy 301 TCAACCCGTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCAGCGGTGTACCG 360
Db 301 TCAACCCGTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCAGCGGTGTACCG 360

Qy 361 ACGAGATCCACTACCTGACCCGACGAGGAGGACCGCACAGTGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCCGACGAGGAGGACCGCACAGTGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGACGCAAGGGCGGTTTCGGGAGGCGCGGGTGTGCTGCTCGCGCAAGCGG 480
Db 421 CGCGGATCGACGCAAGGGCGGTTTCGGGAGGCGCGGGTGTGCTGCTCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCTCTGTCGAGGTGGACTACATGGAGTGTGCGCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTGCTCTGTCGAGGTGGACTACATGGAGTGTGCGCGCGCAGA 540

Qy 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGCAGCCAACTGCC 600
Db 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGCAGCCAACTGCC 600

Qy 601 TGATGGGCGCAACATGACGCGCAGCGGTTCGCTGCGAGCGAGCGCGCGTGG 660
Db 601 TGATGGGCGCAACATGACGCGCAGCGGTTCGCTGCGAGCGAGCGCGCGTGG 660

Qy 661 TGGGACCGGATCGAGCTGCGCGCGCGGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGATCGAGCTGCGCGCGCGGATCGACGCGGCGACGT 705

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Ginteras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACACGACAGCCCTGTATCAACATCCGTCAGTCTGTGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACACGACAGCCCTGTATCAACATCCGTCAGTCTGTGCGG 60

Qy 61 CGATCAAGGAGTTCTTCGGACACAGCCAGCTGTCCAGTTTCATGGACCAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGACACAGCCAGCTGTCCAGTTTCATGGACCAACCCGC 120

Qy 121 TGTGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGG 180
Db 121 TGTGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGG 180

Qy 181 AGCGGCGGGCTGGAGTCCGCGACGTGCAACCCGTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGGGCTGGAGTCCGCGACGTGCAACCCGTCCCACTACGCGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGGG 300

Qy 301 TCAACCCGTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCAGCGGTGTACCG 360
Db 301 TCAACCCGTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCAGCGGTGTACCG 360

Qy 361 ACGAGATCCACTACCTGACCCGACGAGGAGGACCGCACAGTGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCCGACGAGGAGGACCGCACAGTGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGACGCAAGGGCGGTTTCGGGAGGCGCGGGTGTGCTGCTCGCGCAAGCGG 480
Db 421 CGCGGATCGACGCAAGGGCGGTTTCGGGAGGCGCGGGTGTGCTGCTCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCTCTGTCGAGGTGGACTACATGGAGTGTGCGCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTGCTCTGTCGAGGTGGACTACATGGAGTGTGCGCGCGCAGA 540

Qy 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGCAGCCAACTGCC 600
Db 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGCAGCCAACTGCC 600

Qy 601 TGATGGGCGCAACATGACGCGCAGCGGTTCGCTGCGAGCGAGCGCGCGTGG 660
Db 601 TGATGGGCGCAACATGACGCGCAGCGGTTCGCTGCGAGCGAGCGCGCGTGG 660

Qy 661 TGGGACCGGATCGAGCTGCGCGCGCGGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGATCGAGCTGCGCGCGCGGATCGACGCGGCGACGT 705

RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Ginteras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
```

```

; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGAGTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCCAGTCTGGCGG 60
Db 1 CCCAGGAGTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCCAGTCTGGCGG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC 120
Qy 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGGGGCTGGGGCCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGGGGCTGGGGCCGGGTGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGAGGTTCGCGACGTGCAACCCCTCCACATACCGCCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGAGGTTCGCGACGTGCAACCCCTCCACATACCGCCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGATCGGTCTGATCGGTCTGATCG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGATCGGTCTGATCGGTCTGATCG 300
Qy 301 TCAACCCGTTGGGTTTCAGAGAGCGGTACCGCAAGGTGTGACCGGTGTGTCACCG 360
Db 301 TCAACCCGTTGGGTTTCAGAGAGCGGTACCGCAAGGTGTGACCGGTGTGTCACCG 360
Qy 361 ACGAGATCCACTTACCTGACCGCCGACGAGGAGACCGCAAGTGTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTTACCTGACCGCCGACGAGGAGACCGCAAGTGTGGTGGCGAGGCCAACT 420
Qy 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCCGGTGTGTCGCGCGCAAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCCGGTGTGTCGCGCGCAAGGCGG 480
Qy 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGTGTGTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGTGTGTCGCGCGCCAGA 540
Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGACGACGCCAACCGTGGCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGACGACGCCAACCGTGGCC 600
Qy 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTCGCTGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTCGCTGTGGTGGCGAGGCGCGCTGG 660
Qy 661 TGGGCACCGGCATGGAGTGGCGCGCGATCGACCGCGGACGT 705
Db 661 TGGGCACCGGCATGGAGTGGCGCGCGATCGACCGCGGACGT 705

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RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.

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; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 1.9e-155;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CCCAGGAGTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCCAGTCTGGCGG 60
Db 1 CCCAGGAGTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCTGGTGGCGG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC 120
Qy 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGGGGCTGGGGCCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGGGGCTGGGGCCGGGTGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGAGGTTCGCGACGTGCAACCCCTCCACATACCGCCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGAGGTTCGCGACGTGCAACCCCTCCACATACCGCCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGCTGTGCTGTGATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGCTGTGCTGTGATGCGCGG 300
Qy 301 TCAACCCGTTGGGTTTCATCGAGAGCGGTACCGCAAGGTGTGACGGCGTGTGTCACCG 360
Db 301 TCAACCCGTTGGGTTTCATCGAGAGCGGTACCGCAAGGTGTGTCACGGCGTGTGTCACCG 360
Qy 361 ACGAGATCCACTTACCTGACCGCCGACGAGGAGACCGCAAGTGTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTTACCTGACCGCCGACGAGGAGACCGCAAGTGTGGTGGCGAGGCCAACT 420
Qy 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCCGGTGTGTCGCGCGCAAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCCGGTGTGTCGCGCGCAAGGCGG 480
Qy 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGTGTGTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGTGTGTCGCGCGCCAGA 540
Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGACGACGCCAACCGTGGCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGACGACGCCAACCGTGGCC 600
Qy 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTCGCTGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTCGCTGTGGTGGCGAGGCGCGCTGG 660
Qy 661 TGGGCACCGGCATGGAGTGGCGCGCGATCGACCGCGGACGT 705
Db 661 TGGGCACCGGCATGGAGTGGCGCGCGATCGACCGCGGACGT 705

```

```

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas

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; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; NAME/KEY: modified_base
; LOCATION: (525)...(525)
; FEATURE:
; OTHER INFORMATION: n = g,a,c or t
; NAME/KEY: modified_base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
; US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy      1 CCCAGGAGCTGGAGGCGATCACCGGAGACCCCTGATCAACATCCGTCAGTCTGGCGG 60
Db      1 CCCAGGAGCTGGAGGCGATCACCGGAGACCCCTGATCAACATCCGTCAGTCTGGCGG 60

Qy      61 CGATCAAGAGGTTCTTCGGCACCGAGCGAGTGTCCAGTTCATCGACACAGAACACCCGC 120
Db      61 CGATCAAGAGGTTCTTCGGCACCGAGCGAGTGTCCAGTTCATCGACACAGAACACCCGC 120

Qy      121 TGTGGGGCTCACCCACAAGCGCCCTGTTCGGGCGCTGGGCGCCGGGTGCTGTCCCGGG 180
Db      121 TGTGGGGCTCACCCACAAGCGCCCTGTTCGGGCGCTGGGCGCCGGGTGCTGTCCCGGG 180

Qy      181 AGCGGGCGGGCTGGAGGTTCGGACGCGACGTGACCCGTCCTCCACTAGCGCGGATGTCGCCGA 240
Db      181 AGCGGGCGGGCTGGAGGTTCGGACGCGACGTGACCCGTCCTCCACTAGCGCGGATGTCGCCGA 240

Qy      241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGCGGG 300
Db      241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGCGGG 300

Qy      301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGAGCGGCGTGTACCG 360
Db      301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGAGCGGCGTGTACCG 360

Qy      361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
Db      361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420

Qy      421 CGCCGATCGACGCAAGGGCCGGTTCGCGAGGCGCCGGGTCTGCTCGCCGCGCAAGCGG 480
Db      421 CGCCGATCGACGCAAGGGCCGGTTCGCGAGGCGCCGGGTCTGCTCGCCGCGCAAGCGG 480

Qy      481 GCGAGGTGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGCTGTGCGCCGCGCCAGA 540
Db      481 GCGAGGTGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGCTGTGCGCCGCGCCAGA 540

Qy      541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGACCCACCGTGCCTCC 600
Db      541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGACCCACCGTGCCTCC 600

Qy      601 TGATGGGGCGCCAAATGACGCGCAGCGGTTCGCTGCTGGTGGTGGCGGCGCGCTGG 660
Db      601 TGATGGGGCGCCAAATGACGCGCAGCGGTTCGCTGCTGGTGGTGGCGGCGCGCTGG 660

Qy      661 TGGGACCGGCATGGAGCTGCGCGGCGCATCGACGCGGGCGACGT 705

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Db      661 TGGGACCGGCATGGAGCTGCGCGGCGCATCGACGCGGGCGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; NAME/KEY: modified_base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; NAME/KEY: modified_base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
; US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy      1 CCCAGGAGCTGGAGGCGATCACCGGAGACCCCTGATCAACATCCGTCAGTCTGGCGG 60
Db      1 CCCAGGAGCTGGAGGCGATCACCGGAGACCCCTGATCAACATCCGTCAGTCTGGCGG 60

Qy      61 CGATCAAGAGGTTCTTCGGCACCGAGCGAGTGTCCAGTTCATGGACACAGAACCCGC 120
Db      61 CGATCAAGAGGTTCTTCGGCACCGAGCGAGTGTCCAGTTCATGGACACAGAACCCGC 120

Qy      121 TGTGGGGCTCACCCACAAGCGCCCTGTTCGGGCGCTGGGCGCCGGGTGCTGTCCCGGG 180
Db      121 TGTGGGGCTCACCCACAAGCGCCCTGTTCGGGCGCTGGGCGCCGGGTGCTGTCCCGGG 180

Qy      181 AGCGGGCGGGCTGGAGGTTCGGACGCGACGTGACCCGTCCTCCACTAGCGCGGATGTCGCCGA 240
Db      181 AGCGGGCGGGCTGGAGGTTCGGACGCGACGTGACCCGTCCTCCACTAGCGCGGATGTCGCCGA 240

Qy      241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGCGGG 300
Db      241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGCGGG 300

Qy      301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGAGCGGCGTGTACCG 360
Db      301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGAGCGGCGTGTACCG 360

Qy      361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
Db      361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420

Qy      421 CGCCGATCGACGCAAGGGCCGGTTCGCGAGGCGCCGGGTGCTGCTCGCCGCGCAAGCGG 480
Db      421 CGCCGATCGACGCAAGGGCCGGTTCGCGAGGCGCCGGGTGCTGCTCGCCGCGCAAGCGG 480

Qy      481 GCGAGGTGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGCTGTGCGCCGCGCCAGA 540
Db      481 GCGAGGTGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGCTGTGCGCCGCGCCAGA 540

Qy      481 GCGAGGTGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGCTGTGCGCCGCGCCAGA 540
Db      481 GCGAGGTGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGCTGTGCGCCGCGCCAGA 540

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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds  
(without alignments)  
11150.034 Million cell updates/sec

Title: US-09-285-306-5  
Perfect score: 705  
Sequence: 1 cccaggacgtgagcgatc.....ggcgatgcgagcgacgt 705

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents NA:\*  
1: /cgn2\_6/ptodata/1/ina/5A COMB.seq:\*  
2: /cgn2\_6/ptodata/1/ina/5B COMB.seq:\*  
3: /cgn2\_6/ptodata/1/ina/6A COMB.seq:\*  
4: /cgn2\_6/ptodata/1/ina/6B COMB.seq:\*  
5: /cgn2\_6/ptodata/1/ina/PCTUS COMB.seq:\*  
6: /cgn2\_6/ptodata/1/ina/backfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	85.6	706	US-08-797-812-24	Sequence 24, Appl
2	603	85.5	4403765	3 US-09-103-840A-2	Sequence 2, Appl
3	603	85.5	4411529	3 US-09-103-840A-1	Sequence 1, Appl
4	558.2	79.2	3447	3 US-08-313-185-57	Sequence 57, Appl
5	558.2	79.2	3447	3 US-09-082-614A-57	Sequence 57, Appl
6	540.4	76.7	970	1 US-08-030-030-1	Sequence 1, Appl
7	540.4	76.7	970	5 PCT-US95-06790-1	Sequence 1, Appl
8	530.4	75.2	620	2 US-08-757-653-135	Sequence 135, Appl
9	530.4	75.2	620	2 US-08-757-653-135	Sequence 138, Appl
10	530.4	75.2	620	3 US-08-520-946-135	Sequence 138, Appl
11	530.4	75.2	620	3 US-08-520-946-135	Sequence 138, Appl
12	530.4	75.2	620	4 US-09-655-378A-138	Sequence 138, Appl
13	530.4	75.2	620	4 US-09-655-378A-138	Sequence 138, Appl
14	528.8	75.0	620	2 US-08-757-653-136	Sequence 136, Appl
15	528.8	75.0	620	2 US-08-757-653-137	Sequence 137, Appl
16	528.8	75.0	620	2 US-08-757-653-139	Sequence 139, Appl
17	528.8	75.0	620	2 US-08-757-653-140	Sequence 140, Appl
18	528.8	75.0	620	3 US-08-520-946-136	Sequence 136, Appl
19	528.8	75.0	620	3 US-08-520-946-137	Sequence 137, Appl
20	528.8	75.0	620	3 US-08-520-946-139	Sequence 139, Appl
21	528.8	75.0	620	3 US-08-520-946-140	Sequence 140, Appl
22	528.8	75.0	620	4 US-09-655-378A-136	Sequence 136, Appl
23	528.8	75.0	620	4 US-09-655-378A-137	Sequence 137, Appl
24	528.8	75.0	620	4 US-09-655-378A-139	Sequence 139, Appl
25	528.8	75.0	620	4 US-09-655-378A-140	Sequence 140, Appl
26	453.4	64.3	706	3 US-08-797-812-25	Sequence 25, Appl
27	411	58.3	5099	4 US-09-887-052-1	Sequence 1, Appl

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appl
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appl
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
c 31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, App
c 32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
c 35	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
37	293.4	41.6	432	3	US-08-082-614A-59	Sequence 59, Appl
38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
41	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
42	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
44	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
c 45	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App

## ALIGNMENTS

## RESULT 1

US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingersas, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/797,812  
FILING DATE: 07-FEB-1997  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/017,765  
FILING DATE: 15-MAY-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/629,031  
FILING DATE: 08-APR-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/012,631  
FILING DATE: 01-MAR-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/011,339  
FILING DATE: 08-FEB-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Fitts, Renee A.  
REGISTRATION NUMBER: 35,136  
REFERENCE/DOCKET NUMBER: 16528X-018550  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-326-2400  
TELEFAX: 415-326-2422



```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37RV
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116; Mismatches 0; Indels 0; Gaps 0;
Matches 639; Conservative 0;

Qy 1 CCCAGGAGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACAGTCGTGGCGG 60
Db 761003 CCCAGGAGTGGAGGCGATCACACCGCAGACCGTTGATCAACATCCGTCGTGGCGG 761062

Qy 61 CGATCAAGAGTCTTTCGGACACGACGAGTGTCCCGAGTTGATGACAGCAACACCGC 120
Db 761063 CGATCAAGAGTCTTTCGGACACGACGAGTGTCCCGAGTTGATGACAGCAACACCGC 761122

Qy 121 TGTCCGGGCTACCCACAGGCGCCCTGTGCGGCTGGGCGCGGCTGTGTCGCCGG 180
Db 761123 TGTCCGGGCTGACCCACAGGCGCCCTGTGCGGCTGGGCGCGGCTGTGTCGCCGG 761182

Qy 181 AGCGGCGCGGCTGAGGTTCGCGACGTCGACCCGTCCTCCACTACCGCGCGGATGTCGCCGA 240
Db 761183 AGCGTCCGGCTGAGGTTCGCGACGTCGACCCGTCCTCCACTACCGCGCGGATGTCGCCGA 761242

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCGCTGTGTCGTGTATGCGCGG 300
Db 761243 TCGAACCCTCGAGGGGCGCAACATCGGTCTGATCGGTCGCTGTGTCGTGTATGCGCGG 761302

Qy 301 TCAACCCGTCGGGTTTCGAGAGCGCGTACCGCAAGGTGTCACGCGGTGTCACCG 360
Db 761303 TCAACCCGTCGGGTTTCGAGAAACGCGGTACCGCAAGGTGTCACGCGGTGTCACCG 761362

Qy 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGCGCACCTGTGTCGCGAGGCGCAACT 420
Db 761363 ACGAGATCGTGTACCTGACCGCGCAGAGGAGCGCACCTGTGTCGCGAGGCGCAACT 761422

Qy 421 CGCCGATCGACGACAAAGGCGCGGTTTCGCGGAGGCGCGGTCGTGTCGCGCGCAAGGCGG 480
Db 761423 CGCCGATCGATGCGGACGCTGCTTTCGTGAGCGCGCGGTCGTGTCGCGCGCAAGGCGG 761482

Qy 481 CGGAGTTCGAGTACGTCGCTCGTCGAGGTGGACTACATGAGACGTGTCGCGCGCCAGA 540
Db 761483 CGGAGTGGAGTACGTCGCTCGTCGAGGTGGACTACATGAGACGTGTCGCGCGCCAGA 761542

Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGACGCCAACCGTGGCC 600
Db 761543 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGACGCCAACCGTGGCC 761602

Qy 601 TGATGGGCGCCAAATGACAGCCAGCGGTTTCGCTGTCGTCGTCGTCGTCGTCGTCGTCG 660
Db 761603 TCATGGGCGCCAAATGACAGCCAGCGGTTTCGCTGTCGTCGTCGTCGTCGTCGTCGTCG 761662

Qy 661 TGGGACCGGCGATGAGTTCGCGCGCGCGATCGAGCGG 699
Db 761663 TGGGACCGGCGATGAGTTCGCGCGCGCGATCGAGCGG 761701

RESULT 4
US-08-313-185-57
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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Zhang, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57
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Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1124 CCCAGGACGTGGAGGCGATCACACCGCAGACCGCTGATCAATATCCGTCCGTGGTCGCGG 1183

Qy 61 CGATCAAGGAGTCTTTCGGCACCGACCGAGCTGTCCCGAGTTCATGACCCAGACACCCCG 120
Db 1184 CTATCAAGGAATCTTTCGGCACCGACCGAGCTGTCCCGAGTTCATGATCAGAACCAACCTC 1243

Qy 121 TGTCCGGGCTCACCACCAAGCGCGCTGTCCGGCGCTGGGCGCGGTCGTCTGTCCCGGG 180
Db 1244 TGTCCGGGCTGACCCACCAAGCGCGCTGTCCGGCGCTGGGCGCGGTCGTCTGTCCCGGTG 1303

Qy 181 AGCGGCGCGGCTCGAGGTCGCGACGTGACACCGTCCCGTCCCACTACGCGCGGATGTGCCGA 240
Db 1304 AGCGTCCGGGCTAGAGGTCCGTGACGTGACACCGTCCCGTCCCACTACGCGCGGATGTGCCGA 1363

Qy 241 TCGAGACCCCGAGGTCGCCAATCGGTCTGTGATCGGCTCGCTCGCTCGGTGTATCGCGGG 300
Db 1364 TCGAGACTCCCGAGGTCGCCAATCGGTCTGTGATCGGCTCGCTCGCTCGGTGTATCGCGGG 1423

Qy 301 TCAACCCGTCGGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGCGGTGTCACCG 360
Db 1424 TCAACCCGTCGGGTTTCATCGAACAACCGTACCGCAAGGTGGTTCGACGGGTGTCACCG 1483
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; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105U51
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 341 CCCAGGAGCTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 400

Qy 61 CGATCAAGAGGTTCTTCGGCCACCACCCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 120
Db 401 CGATCAAGAGGTTCTTCGGCCACCACCCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 460

Qy 121 TGTGGGGCTCACCCACAAGCGCCCTGTGTGGGCGCTGGGCGCGGTGTCTGTCCCGG 180
Db 461 TGTGGGGTTGACCCACAAGCGCCGACTGTGTGGGCGCTGGGCGCGGTGTCTGTCCCGG 520

Qy 181 AGCGGGCGGGCTGGAGGTCGCGGACGTCACCGTCCACTACGCGCGGATGTCGCCGA 240
Db 521 AGCGTGGCGGGCTGGAGGAGCGGACGTGACCGCGGATGTCGCCGA 580

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGTGATCGGTCGTGTCGGTGTATGCGCGG 300
Db 581 TCGAACCCTTGAGGGGCCCAACATCGGTCGTGATCGGTCGTGTCGGTGTATGCGCGG 640

Qy 301 TCAACCCGTTGGGTTTCAGAGACGCGCTACCGCAAGGTGTGACGCGGTGTGTACCG 360
Db 641 TCAACCCGTTGGGTTTCATCGAAGCGCGTACCGCAAGGTGTGTGACGCGGTGTGTACCG 700

Qy 361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGTGTGGCGGAGGCCAACT 420
Db 701 ACGAGATCGTGTACCTGACCCCGACGAGGAGGACCGCACGTGTGTGTGCAACGCGCAATT 760

Qy 421 CGCCGATCGACGACAAGCGCGGTTTCGCGGAGGCGCGGTCGTGTGTGTCGCGCAAGGCGG 480
Db 761 CGCCGATCGATGCGGACCGTGTCTGTCGAGCGCGGTCGTGTGTGTCGCGCAAGGCGG 820

Qy 481 GCGAGGTGAGTACGTGCCCTCGTCGAGGTGGACTACATGAGCATGTGTGCGCGGCCAGA 540
Db 821 GCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGACTACATGAGCATGTGTGCGCGGCCAGA 880

Qy 541 TGGTGTGCGTGGCAGCCGCGATGATCCCGTTCTCTGAGCAGACGACGCCAACCGTGGCC 600
Db 881 TGGTGTGCGTGGCAGCCGCGATGATTCCTTCTCTGAGCAGACGCCAACCGTGGCC 940

Qy 601 TGATGGGCGCCAACTGACGCGCCAGGCGG 630
Db 941 TCATGGGGGCAACATGACGCGCCAGGCGG 970
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RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1
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Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 341 CCCAGGAGCTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 400

Qy 61 CGATCAAGAGGTTCTTCGGCCACCACCCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 120
Db 401 CGATCAAGAGGTTCTTCGGCCACCACCCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 460

Qy 121 TGTGGGGCTCACCCACAAGCGCCCTGTGTGGGCGCTGGGCGCGGTGTCTGTCCCGG 180
Db 461 TGTGGGGTTGACCCACAAGCGCGCTGTGTGGGCGCTGGGCGCGGTGTCTGTACCGTG 520

Qy 181 AGCGGGCGGGCTGGAGGTCGCGGACGTCGACCGTCCACTACGCGCGGATGTCGCCGA 240
Db 521 AGCGTGGCGGGCTGGAGGAGCGGACGTGACCGCGGATGTCGCCGA 580

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGTGATCGGTCGTGTCGGTGTATGCGCGG 300
Db 581 TCGAACCCTTGAGGGGCCCAACATCGGTCGTGATCGGTCGTGTCGGTGTATGCGCGG 640

Qy 301 TCAACCCGTTGGGTTTCATGAGACGCGCTACCGCAAGGTGTGACGCGGTGTGTACCG 360
Db 641 TCAACCCGTTGGGTTTCATCGAAGCGCGTACCGCAAGGTGTGTGACGCGGTGTGTACCG 700

Qy 361 ACGAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGTGTGGCGGAGGCCAACT 420
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Db 701 ACGAGATCGTGTACCTGACCCGACGAGAGAGACCCGCCACGTCGTGGTGCACAGGCCAATT 760  
Qy 421 CGCCGATCGACGACAAGGGCCGGTTTCGCGGAGGGCCCGGGTGTCTGTCCGCCGCAAGGCGG 480  
Db 761 CGCCGATCGATGCGGACGGTCTGCTTCGTTCGAGCCGCGGCTGCTGGTCCGCCGCAAGGCGG 820  
Qy 481 CGGAGGTGCGATGACGTGCCCTCGTCCGAGGTGGACTACATGGAACGTTCGCGCCGCCAGA 540  
Db 821 CGGAGGTGGAATGACGTGCCCTCGTTCGAGGTGGACTACATGGAACGTTCGCGCCGCCAGA 880  
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGGCC 600  
Db 881 TGGTGTCCGTGGCCACCGCGATGATTCCTTCCTTCGAGCAGACGACGCCAACCGTGGCC 940  
Qy 601 TGATGGGGCCCAACATGACGCCAGCGCGG 630  
Db 941 TCATGGGGCCCAACATGACGCCAGCGG 970

## RESULT 8

US-08-757-653-135  
; Sequence 135, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;  
Best Local Similarity 91.0%; Pred. No. 5.8e-102;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
Qy 36 ATCAACATCCCTCAGTCGTGGCGCGATCAAGAGTTCTTCGCAACAGCCAGCTGTCC 95  
Db 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGCGCAACAGCCAGCTGAGC 60  
Qy 96 CAGTTTCATGACCAAGAACCCGCTGTCGGGGCTCACCAACAGCGCGCTGTGCGGC 155  
Db 61 CAATTTCATGACCAAGAACCCGCTGTCGGGGTTGACCCCAAGCGCGCTGTGCGGC 120

Qy 156 CTGGGCCCGGTGTCTGTCTCCCGGAGCGCGCGCTGGAGTCCCGAGCGTGCACCCG 215  
Db 121 CTGGGCCCGCGGTGTCTGTCTCACGTGAGCGTCCCGGGTTCGAGGTCCCGAGCGTGCACCCG 180  
Qy 216 TCCCACTACGCGCGGATGTGCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGCGCGGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
Qy 276 GGCTCGCTGTCCGTGTATGCGCGGTCAACCCGTTCCGGTTTCATCGAGAGCCGTCACCGC 335  
Db 241 GGCTCGCTGTCCGTGTATGCGCGGTCAACCCGTTTCGGGTTCATCGAAACGCGGTACCGC 300  
Qy 336 AAGTGTGTCCAGCGCGTGTTCACCGACGAGATCCACTACCTGACCGCGCGACGAGGAGGAC 395  
Db 301 AAGTGTGTCCAGCGCGTGTTCAGCGACGAGATCGTGTACTGACCGCGCGACGAGGAGGAC 360  
Qy 396 CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGACACAAAGGGCCGGTTCGCGGAGGCC 455  
Db 361 CGCCACGTGTGGCACAGGCCAAATTCGCCGATCGATCGCGACCGTCTTCGTCGAGCGC 420  
Qy 456 CGGTGTCTGTCCGCGCAAGGGCGGAGGTTCGAGTACGTGCCCTCGTCCGAGGTGAGC 515  
Db 421 CGGTGTCTGTCCGCGCAAGGGCGGAGGTTCGAGTACGTGCCCTCGTCTGAGGTGAGC 480  
Qy 516 TACATGGACGTGTCCGCGCCAGATGGTGTTCGGTGGCCACCGCGATGATCCCTTCCTC 575  
Db 481 TACATGGACGTGTCCGCGCCAGATGGTGTTCGGTGGCCACCGCGATGATTCCTTCCTG 540  
Qy 576 GAGCAGACGACGCCAACCGTGCCTGATGGGCGCCAAACATGACGCGCCAGGGCGGTTCG 635  
Db 541 GAGCAGACGACGCCAACCGTGCCTCATGGGGGCCAAACATGACGCGCCAGGGCGGTGCGC 600  
Qy 636 CTGGTGCACGACGAGGCGCC 655  
Db 601 CTGGTGCCTAGCAGGCGCCC 620

## RESULT 9

US-08-757-653-138/c  
; Sequence 138, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match      75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCTGTCGGCGGATCAAGAGGTTCTTCGGACACAGCCAGCTGTCC 95
Db 620 ATCAACATCCGTCGGCGGTTGTCGCCGATCAAGAGGTTCTTCGGACACAGCCAGCTGAGC 561

QY 96 CAGTTCATGGACACAGAAACCCGCTGTCCGGCTCACCCACAAAGCGCGCTGTCCGG 155
Db 560 CAAATTCATGGACACAGAACCCGCTGTCCGGGTTGACCCACAAAGCGCGCTGTCCGG 501

QY 156 CTGGGCGCGGGTGTCTGTCTCCGGAGCGGGCTGGAGTCCGGACAGTGCACCG 215
Db 500 CTGGGCGCGCGGTCTGTCTACGTGAGCGTGTCCGGCTGGAGTCCGGACAGTGCACCG 441

QY 216 TCCCACTACGCGCGATGTCGCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
Db 440 TCGCACTACGCGCGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381

QY 276 GCCTCGCTGTCTGCTGTATGCGCGGTCAACCCGTTCCGGTTTCATCGAGCGCGTACCGC 335
Db 380 GCCTCGCTGTCTGCTGTATGCGCGGTCAACCCGTTCCGGTTTCATCGAAACCGCTACCGC 321

QY 336 AAGTGTGTGACGCGGTGTCAACGACGAGATCCACTACTGACCGCCGACGAGGAGAC 395
Db 320 AAGTGTGTGACGCGGTGTGACGACGAGATCGTGTACTGACCGCGACGAGGAGAC 261

QY 396 CGCCAGCTGTGGCGAGCCCAACTCGCGGATCGACGACAGGGCGCGTTCGCGAGGCC 455
Db 260 CGCCAGCTGTGGCGAGCCCAATTCGCGGATCGATGCGGAGCGGTCTGTCTGAGCGC 201

QY 456 CGGGTGTGTCGCGCGAAGCGCGGAGGTGAGTACGTGCCCTCTGTCGAGGTGAC 515
Db 200 CGGTGTGTCGCGCGAAGCGCGGAGGTGAGTACGTGCCCTCTGTCGAGGTGAC 141

QY 516 TACATGACGTGTCTCCGCGCAGATGTGTCTGTCGTCGACCGCGATATCCCGTTCCTC 575
Db 140 TACATGACGTGTCTCCGCGCAGATGTGTCTGTCGTCGTCGACCGCGATATGATTCCTC 81

QY 576 GAGCAGGACGCGCAACCGTGCCTGTATGGCGCCCAACATGACGCGCAGCGGTTCG 635
Db 80 GAGCAGGACGCGCAACCGTGCCTGTATGGGGGCAACATGACGCGCAGCGGTTCGCG 21

QY 636 CTGGTGCAGCGAGCGGCC 655
Db 20 CTGGTGCAGCGAGGCC 1

RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; ADDRESSER: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

```
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCTGTCGGCGGATCAAGAGGTTCTTCGGACACAGCCAGCTGTCC 95
Db 1 ATCAACATCCGTCGGCGGTTGTCGCCGATCAAGAGGTTCTTCGGACACAGCCAGCTGAGC 60

QY 96 CAGTTCATGGACACAGAAACCCGCTGTCCGGCTCACCCACAAAGCGCGCTGTCCGG 155
Db 61 CAAATTCATGGACACAGAAACCCGCTGTCCGGGTTGACCCACAAAGCGCGCTGTCCGG 120

QY 156 CTGGGCGCGGGTGTCTGTCTCCGGAGCGGGCTGGAGGTCCGCGACGTGCACCG 215
Db 121 CTGGGCGCGGGTGTCTGTCTACGTGAGGTCTCCGGGCTGGAGGTCCGCGACGTGCACCG 180

QY 216 TCCCACTACGCGCGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
Db 181 TCGCACTACGCGCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240

QY 276 GCCTCGCTGTCTGCTGTATGCGCGGTCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGC 335
Db 241 GCCTCGCTGTCTGCTGTATGCGCGGTCAACCCGTTCCGGTTTCATCGAAACCGGTACCGC 300

QY 336 AAGTGTGTGACGCGGTGTCAACGACGAGATCCACTACTGACCGCCGACGAGGAGAC 395
Db 301 AAGTGTGTGACGCGGTGTGACGACGAGATCGTGTACTGACCGCGACGAGGAGAC 360

QY 396 CGCCAGCTGTGGCGAGCCCAACTCGCGGATCGACGACAGGGCGCGTTCGCGAGGCC 455
Db 361 CGCCAGCTGTGGCGACAGGCCCAATTCGCCGATCGATGCGGAGCGGTCTGTCTGAGCGC 420

QY 456 CGGGTGTGTCGCGCGAAGCGCGGAGGTGAGTACGTGCCCTCTGTCGAGGTGAC 515
Db 421 CGCGTGTGTCGCGCGAAGCGCGGAGGTGAGTACGTGCCCTCTGTCGAGGTGAC 480

QY 516 TACATGACGTGTCTCCGCGCAGATGTGTCTGTCGTCGTCGACCGCGATATCCCGTTCCTC 575
Db 481 TACATGACGTGTCTCCGCGCAGATGTGTCTGTCGTCGTCGTCGACCGCGATATCCCGTTCCTC 540

QY 576 GAGCAGGACGCGCAACCGTGCCTGTATGGCGCCCAACATGACGCGCAGCGGTTCG 635
Db 541 GAGCAGGACGCGCAACCGTGCCTCATGGGGGCAACATGACGCGCAGCGGTTCGCG 600

QY 636 CTGGTGCAGCGAGGCC 655
Db 1 CTGGTGCAGCGAGGCC 1
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Db 601 CTGTCCTAGCGAGGCCCC 620

RESULT 11

US-08-520-946-138/c

; Sequence 138, Application US/08520946

; Patent No. 6372424

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; NUMBER OF SEQUENCES: 160

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent in Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/520,946

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 3; Length 620;

Best Local Similarity 91.0%; Pred. No. 5.8e-102;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCCGCGCGATCAAGAGTTCTTCGCGACCCAGCGCTGTC 95

Db 620 ATCAACATCCGCGCGTGGTCCGCGATCAAGAGTTCTTCGCGACCCAGCGCTGAGC 561

Qy 96 CAGTTTCATGACCAAGAAACCCGTCGCGGCTCACCCAAAGCGCGCTCTCGCG 155

Db 560 CAATTTCATGACCAAGAAACCCGTCGCGGTTGACCCAAAGCGCGCTCTCGCG 501

Qy 156 CTGGCCCGGTTGTTCTCTCCGGAGCGCGCGCTGAGAGTCCGCGAGTGCACCCG 215

Db 500 CTGGGGCCCGCGGTCGTCTACGTGAGCGTCCGGGCTGGAGGTCCGCGAGCTGACCCG 441

Qy 216 TCCCACTACGCCCGATGTGCCGATCGAGACCCGCGAGGTCCCAACATCGGCTGTATC 275

Db 440 TCGCACTACGCCCGATGTGCCGATCGAACCCTGAGGGGCCCAACATCGGCTGTATC 381

Qy 276 GGCTCGCTGTCCGTTATGCGCGGTCAACCCGTTCCGGTTTCATCGAGACCCGTAACCG 335

Db 380 GGCTCGCTGTCCGTTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAGCCCGTACCGC 321

Qy 336 AAGTGTTCGACCGGCTGGTCAACCGAGATCACTACCTGACGCGCGCGAGGAGGAC 395

Db 320 AAGTGTTCGACCGGCTGGTTAGCGACGAGATCGTGTACCTGACGCGCGAGGAGGAC 261

Qy 396 CGCCACGTGTGGCGCAGGCCAACTCCCGATCGACGACAAGGCCCGGTTTCGCGAGGCC 455

Db 260 CGCCACGTGTGGCACAGGCCAATTCGCCGATCGATGCGGACGCTCGTTCTGTCGAGCGC 201

Qy 456 CGGTGTCTGTCCCGCCAAAGCGCGGAGGTGAGTACGTGCTCTCGTCGAGGTGAGC 515

Db 200 CGCTGTCTGTCCCGCCAAAGCGCGGAGTACGTGCTCTGTCGAGGTGAGC 141

Qy 516 TACATGACGTGTCCCGCCGCGCAGATGTTGCGTGGCCACCGGATGATCCCGTTCCTC 575

Db 140 TACATGACGTGTCTCGCCCGCCGCGATGTTGTCGGTGGCCACCGGATGATTCCTTCTG 81

Qy 576 GAGCACGACGACGCAACCGTCCCTGATGGCGCCCAACATGACGCGCAGCGGTTCCG 635

Db 80 GAGCACGACGACGCAACCGTGCCTCATGGGGGCAACATGACGCGCAGCGGTCGCG 21

Qy 636 CTGTCGCGCAGCGAGGCC 655

Db 20 CTGTCGCTAGCGAGGCC 1

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent in Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 5.8e-102;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCCGCGCGATCAAGAGTTCTTCGCGACCCAGCGCTGTC 95

Db 1 ATCAACATCCGCGCGTGGTCCGCGATCAAGAGTTCTTCGCGACCCAGCGCTGAGC 60



QY 96 CAGTTCATGGACCAAGAACCCGCTGTCGGGCTCACCCAAAGCGCGCTGTCGGG 155  
DB 61 CAATTCATGGACCAAGAACCCGCTGTCGGGCTGACCCAAAGCGCGCTGTCGGG 120  
QY 156 CTGGGCGCGGGTGTCTGTCTCCGGGAGCGGGCGGGCTGGAGTCCGCGAAGTGCACCG 215  
DB 121 CTGGGCGCGGGTGTCTGTCTCCGGGAGCGGGCGGGCTGGAGTCCGCGAAGTGCACCG 180  
QY 216 TCCCACTACGGCGGATGTCGGGATCGAGACCCCGGAGGTCCTCAATCGGTCTGATC 275  
DB 181 TCGCACTACGGCGGATGTCGGGATCGAGACCCCGGAGGTCCTCAATCGGTCTGATC 240  
QY 276 GCGTCGCTGCTGATGTCGGGCTCAACCGTTTCGGGTTTCATCGAGCGCGTACCG 335  
DB 241 GCGTCGCTGCTGATGTCGGGCTCAACCGTTTCGGGTTTCATCGAGCGCGTACCG 300  
QY 336 AAGTGTGTGCGAGCGGTGTACCGAGAGATCCACTACCTGACCGCGCGAGAGGAC 395  
DB 301 AAGTGTGTGCGAGCGGTGTAGCGAGAGATCGTGTACCTGACCGCGAGAGGAC 360  
QY 396 CGCCACGTGTGGCGAGCGCAACTCGCGGATCGAGCAAGAGGCGGTTCCGCGAGCG 455  
DB 361 CGCCACGTGTGGCGAGCGCAACTCGCGGATCGAGCAAGAGGCGGTTCCGCGAGCG 420  
QY 456 CGGTGTGTGTCGGCGGCAAGCGGCGAGGTGCGAGTACGTCGCTTCGTGAGGTGAC 515  
DB 421 CGGTGTGTGTCGGCGGCAAGCGGCGAGGTGCGAGTACGTCGCTTCGTGAGGTGAC 480  
QY 516 TACATGAGCTGTGTCGGCGGCGAGGTGTCGGTGGCCACCGCGATGATCCCGTTCTC 575  
DB 481 TACATGAGCTGTGTCGGCGGCGAGGTGTCGGTGGCCACCGCGATGATCCCGTTCTC 540  
QY 576 GAGCAGCAGCGCAACCGTGTGTCGGTGGCCCAACATGAGCGCGAGCGGTTCG 635  
DB 541 GAGCAGCAGCGCAACCGTGTGTCGGTGGCCCAACATGAGCGCGAGCGGTTCG 600  
QY 636 CTGGTGGCGAGCGCGCC 655  
DB 601 CTGGTGGCGAGCGCGCC 620

## RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN &amp; CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 03-Sep-2000

; CLASSIFICATION: &lt;Unknown&gt;

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

;

## TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

; US-09-655-378A-138

## Query Match

Best Local Similarity 75.2%; Score 530.4; DB 4; Length 620;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGCATCAAGAGATTCTTCGGCACCAGCCAGCTGTCC 95

DB 620 ATCAACATCCGTCGGCGGTGTCGCCGATCAAGAGATTCTTCGGCACCAGCCAGCTGAGC 561

QY 96 CAGTTCATGGACCAAGAACACCCGCTGTTCGGGGCTCACCCACAAAGCGCGCTGTCCGCG 155

DB 560 CAATTATGGACCAAGAACACCCGCTGTTCGGGGTTGACCCACAAAGCGCGCTGTCCGCG 501

QY 156 CTGGCGCGGGTGTCTGTCTCCGGGAGCGGCGGGCTGGAGGTCCGCGACGTCGACCGC 215

DB 500 CTGGCGCGCGGGTGTCTGTCTCACTGAGCGTTCGCGGGTGGAGGTCCGCGACGTCGACCGC 441

QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275

DB 440 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GGCTCGTGTCTGCTGTATGCGCGGGTCAACCCGTTTCGGGGTTTCATCGAGACCGCTACCGC 335

DB 380 GGCTCGTGTCTGCTGTACGCGCGGTCAACCCGTTTCGGGGTTTCATCGAAACCGCTACCGC 321

QY 336 AAGTGTGTGACGCGGTGTCTACCGAGAGATCACTACCTGACCGCGCGAGAGAGGAC 395

DB 320 AAGTGTGTGACGCGGTGTGTAGCGAGATCGTGTACCTGACCGCGCGAGAGAGGAC 261

QY 396 CGCCACGTGTGGCGCGAGGCCAACTCGCCGATCGACACAAAGGGCGGTTTCGCGAGGCC 455

DB 260 CGCCACGTGTGGCGAGGCCAACTTCGCCGATCGATGCGGACGCTTCGTCGAGCGC 201

QY 456 CGGTGTGTGTCGCCCGCAAGCGCGGAGGTGAGTACGTCGCCCTCGTCGAGGTGAGC 515

DB 200 CGGTGTGTGTCGCCCGCAAGCGCGGAGGTGAGTACGTCGCCCTCGTCTGAGGTGAGC 141

QY 516 TACATGAGCTGTCTCGCGCGCGAGATGGTGTGGTGGCCACCGCGATGATCCGTTCTC 575

DB 140 TACATGAGCTGTCTCGCGCGCGAGATGGTGTGGTGGCCACCGCGATGATCCGTTCTC 81

QY 576 GAGCAGCAGCGCCAAACCGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 635

DB 80 GAGCAGCAGCGCCAAACCGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 21

QY 636 CTGGTGGCGAGCGAGCGCC 655

DB 20 CTGGTGGCGAGCGAGCGCC 1

## RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermolabile FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

;

```

CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
;
US-08-757-653-136
Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101; Indels 0; Gaps 0;
Matches 563; Conservative 0; Mismatches 57;

Qy 36 ATCAACATCCGTCAGTCGTGGCGCGATCAAGAGATTCTTCGGCACAGCAGCTGTCC 95
Db 1 ATCAACATCCGCGGTGGTCGCGGATCAAGAGATTCTTCGGCACAGCAGCTGTCC 60

Qy 96 CAGTTTCATGACACGAGAACCCCGTCTCGGGGCTCACCAAGCGCGCTGTGGCG 155
Db 61 CAATTTCATGACACGAGAACCCCGTCTCGGGGTTGACCTCAAGCGCGCATGTCCGGCG 120

Qy 156 CTGGCGCCGGGTGTCTCTCCGGGAGCGCGGCTGAGGTCCCGAGCTGCACCCG 215
Db 121 CTGGGGCCCGGGTGTCTGACGTAGCGTCCGGGCTGAGAGTCCGGACGTCACCCG 180

Qy 216 TCCCACTACGCGCGGATGTGCCGATCAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGGTGTGGTGTATGCGGGTCAACCCGTTTGGGTTTCATCGAGAGCCGCTACCGC 335
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGGTGTGGTGTATGCGGGTCAACCCGTTTGGGTTTCATCGAGAGCCGCTACCGC 335
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
;
US-08-757-653-136
Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101; Indels 0; Gaps 0;
Matches 563; Conservative 0; Mismatches 57;

Qy 36 ATCAACATCCGTCAGTCGTGGCGCGATCAAGAGATTCTTCGGCACAGCAGCTGTCC 95
Db 1 ATCAACATCCGCGGTGGTCGCGGATCAAGAGATTCTTCGGCACAGCAGCTGTCC 60

Qy 96 CAGTTTCATGACACGAGAACCCCGTCTCGGGGCTCACCAAGCGCGCTGTGGCG 155
Db 61 CAATTTCATGACACGAGAACCCCGTCTCGGGGTTGACCTCAAGCGCGCATGTCCGGCG 120

Qy 156 CTGGCGCCGGGTGTCTCTCCGGGAGCGCGGCTGAGGTCCCGAGCTGCACCCG 215
Db 121 CTGGGGCCCGGGTGTCTGACGTAGCGTCCGGGCTGAGAGTCCGGACGTCACCCG 180

Qy 216 TCCCACTACGCGCGGATGTGCCGATCAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGGTGTGGTGTATGCGGGTCAACCCGTTTGGGTTTCATCGAGAGCCGCTACCGC 335
Db 241 GGCTCGGTGTGGTGTATGCGGGTCAACCCGTTTGGGTTTCATCGAGAGCCGCTACCGC 300

Qy 336 AAGTGTGTGACGCGGTGTCTCCGAGATCACTACCTGACCGCGCGAGAGGAGAC 395
Db 301 AAGTGTGTGACGCGGTGTCTCCGAGATCACTACCTGACCGCGCGAGAGGAGAC 360

Qy 396 CGCAACGTGTGGCGAGGCAATCTCCCGATCGACGACAAAGGCGCGGTTCCGCGAGGCC 455
Db 361 CGCAACGTGTGGCGAGGCAATCTCCCGATCGATCGGAGCGGTCTCGTTCGAGCGCG 420

Qy 456 CGGTGTGTGTCCCGCGAGCGGCGAGTTCAGTACGTGCGCTTCGTCGAGGTGGAC 515
Db 421 CGGTGTGTGTCCCGCGAGCGGCGAGTTCAGTACGTGCGCTTCGTCGAGGTGGAC 480

Qy 516 TACATGACGTGTCTCGCGCGCGAGATGGTGTGCGTGGCCACCGGATGATCCCGTCTCTC 575
Db 481 TACATGACGTGTCTCGCGCGCGAGATGGTGTGCGTGGCCACCGGATGATTCCTTCTG 540

Qy 576 GAGCACGACGACCAACCCGTTGATGGGCGCCCAACATGACAGCGCCAGGCGGTTCCG 635

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Db 241 GGCTCGCTGTCGGTGTAACGGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 300  
QY 336 AAGGTGGTCGACGGCGTGGTCAACGACGAGATCCACTACCTGACCCCGACGAGGAGAC 395  
Db 301 AAGGTGGTCGACGGCGTGGTTAGCGACGAGATCGTGTACCTGACCCCGACGAGGAGAC 360  
QY 396 CGCCACGTGGTGGCGCGAGGCCAACTCGCGGATCGACGACAAAGGGCGGTTTCGGCGAGGCC 455  
Db 361 CGCCACGTGGTGGCAACAGGCCAATTTCGCCGATCGATGCGGACGGTCGTTTCGTCGAGCG 420  
QY 456 CGGGTGGTGGTCCCGCGCAAGCGCGGCGAGGTTCGAGTACGTGCCCTCGTCCGAGGTGGAC 515  
Db 421 CGCGTGGTGGTCCCGCGCAAGCGCGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480  
QY 516 TACATGGAGGTGTCGCGCGCGCCAGATGGTTCGGTGGCCACCGCGATGATCCCGTTCCTC 575  
Db 481 TACATGGAGGTGTCGCGCGCGCCAGATGGTTCGGTGGCCACCGCGATGATTCCTTCCTG 540  
QY 576 GAGCACGACGACGCCCAACCGTGCCCTGATGGCGGCCAAACATGCGACGCCAGCGGTTCGG 635  
Db 541 GAGCACGACGACGCCCAACCGTGCCCTCATGGGGGCAAAATGACGCCAGCGGTTCGG 600  
QY 636 CTGGTGGCGAGCGAGGCCCC 655  
Db 601 CTGGTCCGTAGCGAGGCCCC 620

Search completed: August 24, 2005, 22:24:35  
Job time : 114.459 secs

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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds  
(without alignments)  
10213.139 Million cell updates/sec

Title: US-09-285-306-5

Perfect score: 705

Sequence: 1 cccaggacgaggcgatc.....ggcgatcgagcgcgacgt 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 327154945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:\*

- 1: /cgn2\_6/ptodata/1/pubpna/US07\_PUBCOMB.seq.\*
- 2: /cgn2\_6/ptodata/1/pubpna/PCT\_NEW\_PUB.seq.\*
- 3: /cgn2\_6/ptodata/1/pubpna/US06\_NEW\_PUB.seq.\*
- 4: /cgn2\_6/ptodata/1/pubpna/US06\_PUBCOMB.seq.\*
- 5: /cgn2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq.\*
- 6: /cgn2\_6/ptodata/1/pubpna/PCTUS\_PUBCOMB.seq.\*
- 7: /cgn2\_6/ptodata/1/pubpna/US08\_NEW\_PUB.seq.\*
- 8: /cgn2\_6/ptodata/1/pubpna/US08\_PUBCOMB.seq.\*
- 9: /cgn2\_6/ptodata/1/pubpna/US09A\_PUBCOMB.seq.\*
- 10: /cgn2\_6/ptodata/1/pubpna/US09B\_PUBCOMB.seq.\*
- 11: /cgn2\_6/ptodata/1/pubpna/US09C\_PUBCOMB.seq.\*
- 12: /cgn2\_6/ptodata/1/pubpna/US09\_NEW\_PUB.seq.\*
- 13: /cgn2\_6/ptodata/1/pubpna/US10A\_PUBCOMB.seq.\*
- 14: /cgn2\_6/ptodata/1/pubpna/US10B\_PUBCOMB.seq.\*
- 15: /cgn2\_6/ptodata/1/pubpna/US10C\_PUBCOMB.seq.\*
- 16: /cgn2\_6/ptodata/1/pubpna/US10D\_PUBCOMB.seq.\*
- 17: /cgn2\_6/ptodata/1/pubpna/US10E\_PUBCOMB.seq.\*
- 18: /cgn2\_6/ptodata/1/pubpna/US10F\_PUBCOMB.seq.\*
- 19: /cgn2\_6/ptodata/1/pubpna/US10G\_PUBCOMB.seq.\*
- 20: /cgn2\_6/ptodata/1/pubpna/US10H\_PUBCOMB.seq.\*
- 21: /cgn2\_6/ptodata/1/pubpna/US10I\_PUBCOMB.seq.\*
- 22: /cgn2\_6/ptodata/1/pubpna/US10\_NEW\_PUB.seq.\*
- 23: /cgn2\_6/ptodata/1/pubpna/US11A\_PUBCOMB.seq.\*
- 24: /cgn2\_6/ptodata/1/pubpna/US11\_NEW\_PUB.seq.\*
- 25: /cgn2\_6/ptodata/1/pubpna/US60\_NEW\_PUB.seq.\*
- 26: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	705	9	US-09-285-306-4
2	705	100.0	705	9	US-09-285-306-5
3	705	100.0	705	9	US-09-285-306-6
4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-12

8	705	100.0	705	9	US-09-285-306-13	Sequence 13, Appl
9	705	100.0	705	9	US-09-285-306-14	Sequence 14, Appl
10	705	100.0	705	9	US-09-285-306-16	Sequence 16, Appl
11	705	100.0	705	9	US-09-285-306-24	Sequence 24, Appl
12	703.4	99.8	705	9	US-09-285-306-17	Sequence 17, Appl
13	695	98.6	705	9	US-09-285-306-3	Sequence 3, Appl
14	693.4	98.4	705	9	US-09-285-306-11	Sequence 11, Appl
15	691	98.0	705	9	US-09-285-306-10	Sequence 10, Appl
16	691	98.0	3444	17	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appl
18	687	97.4	687	9	US-09-285-306-19	Sequence 19, Appl
19	687	97.4	687	9	US-09-285-306-20	Sequence 20, Appl
20	687	97.4	687	9	US-09-285-306-21	Sequence 21, Appl
21	687	97.4	687	9	US-09-285-306-22	Sequence 22, Appl
22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appl
23	687	97.4	687	9	US-09-285-306-25	Sequence 25, Appl
24	687	97.4	687	9	US-09-285-306-27	Sequence 27, Appl
25	660.2	93.6	705	9	US-09-285-306-143	Sequence 143, App
26	658.6	93.4	705	9	US-09-285-306-144	Sequence 144, App
27	655.4	93.0	705	9	US-09-285-306-87	Sequence 87, Appl
28	655.4	93.0	705	9	US-09-285-306-88	Sequence 88, Appl
29	655.4	93.0	705	9	US-09-285-306-90	Sequence 90, Appl
30	655.4	93.0	705	9	US-09-285-306-92	Sequence 92, Appl
31	655.4	93.0	705	9	US-09-285-306-96	Sequence 96, Appl
32	653.8	92.7	705	9	US-09-285-306-84	Sequence 84, Appl
33	653.8	92.7	705	9	US-09-285-306-86	Sequence 86, Appl
34	653.8	92.7	705	9	US-09-285-306-93	Sequence 93, Appl
35	653.8	92.7	705	9	US-09-285-306-95	Sequence 95, Appl
36	653.8	92.7	705	9	US-09-285-306-85	Sequence 85, Appl
37	652.2	92.5	705	9	US-09-285-306-89	Sequence 89, Appl
38	652.2	92.5	705	9	US-09-285-306-91	Sequence 91, Appl
39	652.2	92.5	705	9	US-09-285-306-181	Sequence 181, App
40	652.2	92.5	705	9	US-09-285-306-146	Sequence 146, App
41	642.2	91.1	687	9	US-09-285-306-148	Sequence 148, App
42	642.2	91.1	687	9	US-09-285-306-148	Sequence 148, App
43	637.4	90.4	687	9	US-09-285-306-100	Sequence 100, App
44	635.8	90.2	687	9	US-09-285-306-99	Sequence 99, Appl
45	635.8	90.2	687	9	US-09-285-306-145	Sequence 145, App

#### ALIGNMENTS

RESULT 1

US-09-285-306-4

; Sequence 4, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285.306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 4

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-4

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 8.2e-156; Indels 0; Gaps 0;

Matches 705; Conservative 0; Mismatches 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGAGACCCCTGTATCAACATCCGTCAGTCGTGGCGG 60

Db 1 CCCAGGACGTGGAGGCGATCACACCGAGACCCCTGTATCAACATCCGTCAGTCGTGGCGG 60

```
QY 61 CGATCAAGGAGTCTTCCGGCACACGACAGCTGTCCAGTTCATGAGCAGAACACCGC 120
Db 61 CGATCAAGGAGTCTTCCGGCACACGACAGCTGTCCAGTTCATGAGCAGAACACCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGGCTGGGCGCGGTGTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGGCTGGGCGCGGTGTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGGTCGCGAGCTGCAACCGTCCACTACGGCCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCGCGAGCTGCAACCGTCCACTACGGCCGGATGTGCCGA 240
QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300
Db 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300
QY 301 TCAACCGGTTCCGGGTTCAATCGAGACGCGGTACCGCAAGGTGGTTCACCG 360
Db 301 TCAACCGGTTCCGGGTTCAATCGAGACGCGGTACCGCAAGGTGGTTCACCG 360
QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGCAGGCCAACT 420
QY 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTTCTGTCCCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTTCTGTCCCGCAAGCGG 480
QY 481 GCGAGGTCGAGTACGTGCGCTCTCGAGGTGGACTACATGGAAGTTCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCGCTCTCGAGGTGGACTACATGGAAGTTCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGCC 600
Db 541 TGGTGTCCGTGGCCACCGCATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGCC 600
QY 601 TGATGGGCGCCAAATGACAGCCAGCGGTTCCGCTGTGTCGAGCAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACAGCCAGCGGTTCCGCTGTGTCGAGCAGGCGCGCTGG 660
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGATCGAGCGGGCGACGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGATCGAGCGGGCGACGT 705
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## RESULT 2

US-09-285-306-5

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; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5
```

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 1 CCCAGGACGTGGAGCGATCACCGCAGCCCTGATCAACATCCGTCCAGTCGTGGCG 60
|||||
```

```
Db 1 CCCAGGACGTGGAGCGATCACCGCAGCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTCTTCCGGCACACGACAGCTGTCCAGTTCATGAGCAGAACACCGC 120
Db 61 CGATCAAGGAGTCTTCCGGCACACGACAGCTGTCCAGTTCATGAGCAGAACACCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGGCTGGGCGCGGTGTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGGCTGGGCGCGGTGTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGGTCGCGAGCTGCAACCGTCCACTACGGCCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCGCGAGCTGCAACCGTCCACTACGGCCGGATGTGCCGA 240
QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300
Db 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300
QY 301 TCAACCGGTTCCGGGTTCAATCGAGACGCGGTACCGCAAGGTGGTTCACCG 360
Db 301 TCAACCGGTTCCGGGTTCAATCGAGACGCGGTACCGCAAGGTGGTTCACCG 360
QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGCAGGCCAACT 420
QY 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTTCTGTCCCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTTCTGTCCCGCAAGCGG 480
QY 481 GCGAGGTCGAGTACGTGCGCTCTCGAGGTGGACTACATGGAAGTTCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCGCTCTCGAGGTGGACTACATGGAAGTTCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGCC 600
Db 541 TGGTGTCCGTGGCCACCGCATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGCC 600
QY 601 TGATGGGCGCCAAATGACAGCCAGCGGTTCCGCTGTGTCGAGCAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACAGCCAGCGGTTCCGCTGTGTCGAGCAGGCGCGCTGG 660
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGATCGAGCGGGCGACGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGATCGAGCGGGCGACGT 705
```

## RESULT 3

US-09-285-306-6

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; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6
```

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 1 CCCAGGAGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
Db 1 CCCAGGAGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
QY 121 TGTCCGGGCTACCCACAAGCGCCCTGTGTGGCGCTGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTACCCACAAGCGCCCTGTGTGGCGCTGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGGCTGAGGTCCGCGACGTGACCCCTGCCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGGCTGAGGTCCGCGACGTGACCCCTGCCACTACGCGCGGATGTGCCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGGT 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGGT 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCACCG 360
QY 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTGTGTGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTGTGTGCGCAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGCGGTTTCGGCGAGGCGCGGGTGTGTGTCGCGCAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGGTTTCGGCGAGGCGCGGGTGTGTGTCGCGCAGGCGG 480
QY 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGGAGGCGCGCTGG 600
Db 541 TGGTGTGGTGGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGGAGGCGCGCTGG 600
QY 601 TGATGGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGGAGGCGCGCTGG 660
QY 661 TGGGCAACCGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
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## RESULT 4

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US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7
```

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;

```
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCAGGAGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
Db 1 CCCAGGAGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
QY 121 TGTCCGGGCTACCCACAAGCGCCCTGTGTGGCGCTGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTACCCACAAGCGCCCTGTGTGGCGCTGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGGCTGAGGTCCGCGACGTGACCCCTGCCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGGCTGAGGTCCGCGACGTGACCCCTGCCACTACGCGCGGATGTGCCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGGT 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGGT 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCACCG 360
QY 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTGTGTGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTGTGTGCGCAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGCGGTTTCGGCGAGGCGCGGGTGTGTGTCGCGCAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGGTTTCGGCGAGGCGCGGGTGTGTGTCGCGCAGGCGG 480
QY 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGGAGGCGCGCTGG 600
Db 541 TGGTGTGGTGGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGGAGGCGCGCTGG 600
QY 601 TGATGGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGGAGGCGCGCTGG 660
QY 661 TGGGCAACCGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
```

## RESULT 5

```
US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8
```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCAACCGAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGCATCAACCGAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60

Qy 61 CGATCAAGGAGTCTTTCGGCACCAAGCGAGCGCTGTCGGGCTGGGCGCCGGGTGGTCTGTCCCGGG 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAAGCGAGCGCTGTCGGGCTGGGCGCCGGGTGGTCTGTCCCGGG 120

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTCGGGCTGGGCGCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTCGGGCTGGGCGCCGGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGCTGGAGTCCGAGCGTGCACCGTCCACTACGGCGGAGTGTGCCGA 240
Db 181 AGCGGGCGGCTGGAGTCCGAGCGTGCACCGTCCACTACGGCGGAGTGTGCCGA 240

Qy 241 TCGAGACCCCGAGGTTCCCAACATCGTCTGATCGCTCGCTGCGGTGATCGCGGG 300
Db 241 TCGAGACCCCGAGGTTCCCAACATCGTCTGATCGCTCGCTGCGGTGATCGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGCACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGCACCG 360

Qy 361 ACAGATGTCATCTACCTGACCGCGAGCAGAGAGACCGGCACAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATGTCATCTACCTGACCGCGAGCAGAGAGACCGGCACAGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGACGACAAAGGCGGTTTCGGAGGCGCCGGTCTGTCGGCGCAAGGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGGTTTCGGAGGCGCCGGTCTGTCGGCGCAAGGCGG 480

Qy 481 GCGAGGTGAGTACGTGCTCGTCCGAGTGGACTACATGAGACGTGTCGGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCTCGTCCGAGTGGACTACATGAGACGTGTCGGCGCGCCAGA 540

Qy 541 TGGTGTGGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCCAACTGTCGCC 600
Db 541 TGGTGTGGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCCAACTGTCGCC 600

Qy 601 TGATGGGCGCAACATGACGCGCGTTCGCTGTTGTCGAGCAGGCGCGCTGG 660
Db 601 TGATGGGCGCAACATGACGCGCGTTCGCTGTTGTCGAGCAGGCGCGCTGG 660

Qy 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

```
RESULT 6
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
```

```
US-09-285-306-9
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCAACCGAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGCATCAACCGAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60

Qy 61 CGATCAAGGAGTCTTTCGGCAACAGCGCGCTGTCGGGCTGGGCGCCGGGTGGTCTGTCCCGGG 120
Db 61 CGATCAAGGAGTCTTTCGGCAACAGCGCGCTGTCGGGCTGGGCGCCGGGTGGTCTGTCCCGGG 120

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTCGGGCTGGGCGCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTCGGGCTGGGCGCCGGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGCTGGAGTCCGCGACCGTGCACCGTCCACTACGGCGGAGTGTGCCGA 240
Db 181 AGCGGGCGGCTGGAGTCCGCGACCGTGCACCGTCCACTACGGCGGAGTGTGCCGA 240

Qy 241 TCGAGACCCCGAGGTTCCCAACATCGTCTGATCGCTCGCTGCGGTGATCGCGGG 300
Db 241 TCGAGACCCCGAGGTTCCCAACATCGTCTGATCGCTCGCTGCGGTGATCGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGCACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGCACCG 360

Qy 361 ACAGATGTCATCTACCTGACCGCGAGCAGAGAGACCGGCACAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATGTCATCTACCTGACCGCGAGCAGAGAGACCGGCACAGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGACGACAAAGGCGGTTTCGGAGGCGCCGGTCTGTCGGCGCAAGGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGGTTTCGGAGGCGCCGGTCTGTCGGCGCAAGGCGG 480

Qy 481 GCGAGGTGAGTACGTGCTCGTCCGAGTGGACTACATGAGACGTGTCGGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCTCGTCCGAGTGGACTACATGAGACGTGTCGGCGCGCCAGA 540

Qy 541 TGGTGTGGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCCAACTGTCGCC 600
Db 541 TGGTGTGGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCCAACTGTCGCC 600

Qy 601 TGATGGGCGCAACATGACGCGCGTTCGCTGTTGTCGAGCAGGCGCGCTGG 660
Db 601 TGATGGGCGCAACATGACGCGCGTTCGCTGTTGTCGAGCAGGCGCGCTGG 660

Qy 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

```
RESULT 7
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
```



```
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTTCAGTCTGTGGCGG 60
   |||||
Db 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTTCAGTCTGTGGCGG 60
   |||||
Qy 61 CGATCAAGAGATTCTTCCGSCACACGAGCTGTCTCCAGTTCTATGACACAGAACACCCGC 120
   |||||
Db 61 CGATCAAGAGATTCTTCCGSCACACGAGCTGTCTCCAGTTCTATGACACAGAACACCCGC 120
   |||||
Qy 121 TGTGGGGCTCACCCACAAGGCGCGCTGTCCGGCGCTGGGGCCGGGTGGTCTGTCCCGGG 180
   |||||
Db 121 TGTGGGGCTCACCCACAAGGCGCGCTGTCCGGCGCTGGGGCCGGGTGGTCTGTCCCGGG 180
   |||||
Qy 181 AGCGGGCGGGCTGAGAGTCCGCGAGCTGCGACCGTCCCGTCCCACTACGCGCGGATGTGCCGA 240
   |||||
Db 181 AGCGGGCGGGCTGAGAGTCCGCGAGCTGCGACCGTCCCGTCCCACTACGCGCGGATGTGCCGA 240
   |||||
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGG 300
   |||||
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTGACGCGGTGTACCG 360
   |||||
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTGACGCGGTGTACCG 360
   |||||
Qy 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCAAGTGTGTGCGCGAGGCCAACT 420
   |||||
Db 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCAAGTGTGTGCGCGAGGCCAACT 420
   |||||
Qy 421 CGCGATCGACGACAAAGGGCGCGTTCCGGAGGCGCGGGTGTCTGTCGCCCGCAAGGCGG 480
   |||||
Db 421 CGCGATCGACGACAAAGGGCGCGTTCCGGAGGCGCGGGTGTCTGTCGCCCGCAAGGCGG 480
   |||||
Qy 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGTGTGCGCGGCCAGA 540
   |||||
Db 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGTGTGCGCGGCCAGA 540
   |||||
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCAGCA CGA CGA CGCCAAACCGTGTGCC 600
   |||||
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCAGCA CGA CGA CGCCAAACCGTGTGCC 600
   |||||
Qy 601 TGATGGGCGCCAAACATGACGCGCGAGCGGTTCGGCTGTTCCGTCGAGCGAGGCGCGCTGG 660
   |||||
Db 601 TGATGGGCGCCAAACATGACGCGCGAGCGGTTCGGCTGTTCCGTCGAGCGAGGCGCGCTGG 660
   |||||
Qy 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
   |||||
Db 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
   |||||
```

```
RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

```
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTTCAGTCTGTGGCGG 60
   |||||
Db 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTTCAGTCTGTGGCGG 60
   |||||
Qy 61 CGATCAAGAGATTCTTCCGSCACACGAGCTGTCTCCAGTTCTATGACACAGAACACCCGC 120
   |||||
Db 61 CGATCAAGAGATTCTTCCGSCACACGAGCTGTCTCCAGTTCTATGACACAGAACACCCGC 120
   |||||
Qy 121 TGTGGGGCTCACCCACAAGGCGCGCTGTCCGGCGCTGGGGCCGGGTGGTCTGTCCCGGG 180
   |||||
Db 121 TGTGGGGCTCACCCACAAGGCGCGCTGTCCGGCGCTGGGGCCGGGTGGTCTGTCCCGGG 180
   |||||
Qy 181 AGCGGGCGGGCTGAGAGTCCGCGAGCTGCGACCGTCCCACTACGCGCGGATGTGCCGA 240
   |||||
Db 181 AGCGGGCGGGCTGAGAGTCCGCGAGCTGCGACCGTCCCACTACGCGCGGATGTGCCGA 240
   |||||
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGG 300
   |||||
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTGACGCGGTGTACCG 360
   |||||
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTGACGCGGTGTACCG 360
   |||||
Qy 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCAAGTGTGTGCGCGAGGCCAACT 420
   |||||
Db 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCAAGTGTGTGCGCGAGGCCAACT 420
   |||||
Qy 421 CGCGATCGACGACAAAGGGCGCGTTCCGGAGGCGCGGGTGTCTGTCGCCCGCAAGGCGG 480
   |||||
Db 421 CGCGATCGACGACAAAGGGCGCGTTCCGGAGGCGCGGGTGTCTGTCGCCCGCAAGGCGG 480
   |||||
Qy 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGTGTGCGCGGCCAGA 540
   |||||
Db 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGTGTGCGCGGCCAGA 540
   |||||
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCAGCA CGA CGA CGCCAAACCGTGTGCC 600
   |||||
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCAGCA CGA CGA CGCCAAACCGTGTGCC 600
   |||||
Qy 601 TGATGGGCGCCAAACATGACGCGCGAGCGGTTCGGCTGTTCCGTCGAGCGAGGCGCGCTGG 660
   |||||
Db 601 TGATGGGCGCCAAACATGACGCGCGAGCGGTTCGGCTGTTCCGTCGAGCGAGGCGCGCTGG 660
   |||||
Qy 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
   |||||
Db 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
   |||||
```

```
RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
```

; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 14  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-14

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 CCCAGGACGTGGAGCGGATCACACCGAGACCCCTGTATCAACATCCGTCACAGTCGTGGCGG 60  
Db 1 CCCAGGACGTGGAGCGGATCACACCGAGACCCCTGTATCAACATCCGTCACAGTCGTGGCGG 60  
Qy 61 CGATCAAGGAGTTCTTTCGGACACGACGAGTCGTCCCAAGTTTCATGGACAGAACCCGC 120  
Db 61 CGATCAAGGAGTTCTTTCGGACACGACGAGTCGTCCCAAGTTTCATGGACAGAACCCGC 120  
Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCGCGGTCTGTCTGCCGG 180  
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCGCGGTCTGTCTGCCGG 180  
Qy 181 AGCGGGCGGGCTCGAGGTCGCGACGTGCAACCCGTCCTCCACTACGGCGGATGTGCCCGA 240  
Db 181 AGCGGGCGGGCTCGAGGTCGCGACGTGCAACCCGTCCTCCACTACGGCGGATGTGCCCGA 240  
Qy 241 TCAGAGACCCGGAGGTCCTCAACATCCGTCGTATCGGCTGTCTGTCTGCCGG 300  
Db 241 TCAGAGACCCGGAGGTCCTCAACATCCGTCGTATCGGCTGTCTGTCTGCCGG 300  
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGTCGACGGGTGTACCG 360  
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGTCGACGGGTGTACCG 360  
Qy 361 ACAGAGTCCACTACTGACCGCGACGAGGAGGACCGCCACGTCGTGGCGAGGCCAACT 420  
Db 361 ACAGAGTCCACTACTGACCGCGACGAGGAGGACCGCCACGTCGTGGCGAGGCCAACT 420  
Qy 421 CGCCGATCGACGACAAGGGCGGTTTCGGAGGCGCGGTGTCTGTCTGCCGGAGCGG 480  
Db 421 CGCCGATCGACGACAAGGGCGGTTTCGGAGGCGCGGTGTCTGTCTGCCGGAGCGG 480  
Qy 481 GCGAGGTCGAGTACGTGCTCTGTCGAGGTGGACTACATGGACGTCTGCGCGCGCAGA 540  
Db 481 GCGAGGTCGAGTACGTGCTCTGTCGAGGTGGACTACATGGACGTCTGCGCGCGCAGA 540  
Qy 541 TGGTGTCCGTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGACGCAACCGTGCC 600  
Db 541 TGGTGTCCGTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGACGCAACCGTGCC 600  
Qy 601 TGATGGGCGCAACATGACGCGCAGCGGTTCCGCTGTGTGGAGGCGCGCGCTGG 660  
Db 601 TGATGGGCGCAACATGACGCGCAGCGGTTCCGCTGTGTGGAGGCGCGCGCTGG 660  
Qy 661 TGGGACCGGATCGAGCTGCGCGCGCGGATCGACGCGGCGACGT 705  
Db 661 TGGGACCGGATCGAGCTGCGCGCGCGGATCGACGCGGCGACGT 705

RESULT 10  
US-09-285-306-16  
; Sequence 16, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gengeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285, 306A  
; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 16  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-16

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 CCCAGGACGTGGAGCGGATCACACCGAGACCCCTGTATCAACATCCGTCACAGTCGTGGCGG 60  
Db 1 CCCAGGACGTGGAGCGGATCACACCGAGACCCCTGTATCAACATCCGTCACAGTCGTGGCGG 60  
Qy 61 CGATCAAGGAGTTCTTTCGGACACGACGAGTCGTCCCAAGTTTCATGGACAGAACCCGC 120  
Db 61 CGATCAAGGAGTTCTTTCGGACACGACGAGTCGTCCCAAGTTTCATGGACAGAACCCGC 120  
Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCGCGGTCTGTCTGCCGG 180  
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCGCGGTCTGTCTGCCGG 180  
Qy 181 AGCGGGCGGGCTCGAGGTCGCGACGTGCAACCCGTCCTCCACTACGGCGGATGTGCCCGA 240  
Db 181 AGCGGGCGGGCTCGAGGTCGCGACGTGCAACCCGTCCTCCACTACGGCGGATGTGCCCGA 240  
Qy 241 TCAGAGACCCGGAGGTCCTCAACATCCGTCGTATCGGCTGTCTGTCTGCCGG 300  
Db 241 TCAGAGACCCGGAGGTCCTCAACATCCGTCGTATCGGCTGTCTGTCTGCCGG 300  
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGTCGACGGGTGTACCG 360  
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGTCGACGGGTGTACCG 360  
Qy 361 ACAGAGTCCACTACTGACCGCGACGAGGAGGACCGCCACGTCGTGGCGAGGCCAACT 420  
Db 361 ACAGAGTCCACTACTGACCGCGACGAGGAGGACCGCCACGTCGTGGCGAGGCCAACT 420  
Qy 421 CGCCGATCGACGACAAGGGCGGTTTCGGAGGCGCGGTGTCTGTCTGCCGGAGCGG 480  
Db 421 CGCCGATCGACGACAAGGGCGGTTTCGGAGGCGCGGTGTCTGTCTGCCGGAGCGG 480  
Qy 481 GCGAGGTCGAGTACGTGCTCTGTCGAGGTGGACTACATGGACGTCTGCGCGCGCAGA 540  
Db 481 GCGAGGTCGAGTACGTGCTCTGTCGAGGTGGACTACATGGACGTCTGCGCGCGCAGA 540  
Qy 541 TGGTGTCCGTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGACGCAACCGTGCC 600  
Db 541 TGGTGTCCGTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGACGCAACCGTGCC 600  
Qy 601 TGATGGGCGCAACATGACGCGCAGCGGTTCCGCTGTGTGGAGGCGCGCGCTGG 660  
Db 601 TGATGGGCGCAACATGACGCGCAGCGGTTCCGCTGTGTGGAGGCGCGCGCTGG 660  
Qy 661 TGGGACCGGATCGAGCTGCGCGCGCGGATCGACGCGGCGACGT 705  
Db 661 TGGGACCGGATCGAGCTGCGCGCGCGGATCGACGCGGCGACGT 705

RESULT 11  
US-09-285-306-24  
; Sequence 24, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gengeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US

```

; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 131
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

```

Query Match	100.0%	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0%;	Pred. No. 8.2e-156;		
Matches 705;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	CCGAGGACGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACGTCTGGCGG	60	
Db	1	CCGAGGACGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACGTCTGGCGG	60	
Qy	61	CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCTCCAGTTTCATGGACCAGAACACCCGC	120	
Db	61	CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCTCCAGTTTCATGGACCAGAACACCCGC	120	
Qy	121	TGTCGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTTGGGCCCGGGTGGTCTGTCTCCGG	180	
Db	121	TGTCGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTTGGGCCCGGGTGGTCTGTCTCCGG	180	
Qy	181	AGCGGCGCGGCTGGAGGTCGCGACCGTGCACCGTCCCACTACGGCCGGATGTGCCCGA	240	
Db	181	AGCGGCGCGGCTGGAGGTCGCGACCGTGCACCGTCCCACTACGGCCGGATGTGCCCGA	240	
Qy	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTCTCGGTGTATCGCGG	300	
Db	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTCTCGGTGTATCGCGG	300	
Qy	301	TCAACCGTTCGGGTTTCATCGAGACGCGTACCCGAAAGTGGTTCAGCGCGTGTGTACCG	360	
Db	301	TCAACCGTTCGGGTTTCATCGAGACGCGTACCCGAAAGTGGTTCAGCGCGTGTGTACCG	360	
Qy	361	ACGAGATCCACTACCTGACCGCCGACGAGGAGACCCGACGTTGGTGGCGCAGGCCA	420	
Db	361	ACGAGATCCACTACCTGACCGCCGACGAGGAGACCCGACGTTGGTGGCGCAGGCCA	420	
Qy	421	CGCGGATCGACGACAAGGGCCGGTTTCGCGAGGCGCGGTTGCTGGTTCGCGCGCAAGCGG	480	
Db	421	CGCGGATCGACGACAAGGGCCGGTTTCGCGAGGCGCGGTTGCTGGTTCGCGCGCAAGCGG	480	
Qy	481	GCAGGTCGAGTACGTGCCCTTCGTCGAGGTGGA	540	
Db	481	GCAGGTCGAGTACGTGCCCTTCGTCGAGGTTGGACTACATGGACGTGTTCGCGCGCCAGA	540	
Qy	541	TGCTGTCTGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGACGACCGCAACCGTGGCC	600	
Db	541	TGCTGTCTGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGACGACCGCAACCGTGGCC	600	
Qy	601	TGATGGCGGCCAACATGACAGCGCCAGCGGTTTCGCTGGTTCGCGAGCAGCGCGCGTGG	660	
Db	601	TGATGGCGGCCAACATGACAGCGCCAGCGGTTTCGCTGGTTCGCGAGCAGCGCGCGTGG	660	
Qy	661	TGGGACCCGCGATGAGCTGCGCGCGGATTCGACGCGGCGACGT	705	
Db	661	TGGGACCCGCGATGAGCTGCGCGCGGATTCGACGCGGCGACGT	705	

RESULT 12  
US-09-285-306-17  
; Sequence 17, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Brenkow, Jorg  
; APPLICANT: Aflymatrix, Inc.

```

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

```

Query Match	99.8%	Score	703.4	DB	9	Length	705
Best Local Similarity	99.9%	Pred. No.	1.9e-155				
Matches	704	Conservative	0	Mismatches	1	Indels	0
Qy	1	CCGAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTCGTGGCGG	60				
Db	1	CCGAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTCGTGGCGG	60				
Qy	61	CGATCAAGGAGTTCTTCGGCACCACGACGAGTGTCCCAAGTTTCATGGACCAGAACACCCGC	120				
Db	61	CGATCAAGGAGTTCTTCGGCACCACGACGAGTGTCCCAAGTTTCATGGACCAGAACACCCGC	120				
Qy	121	TGTCGGGGCTCACCCACAAGGGCGGCTGTGCGGCGCTGGGGCCCGGGTGCTGTGTCGCCGG	180				
Db	121	TGTCGGGGCTCACCCACAAGGGCGGCTGTGCGGCGCTGGGGCCCGGGTGCTGTGTCGCCGG	180				
Qy	181	AGCGGGCCGGGCTGGAGGTTCGGACGCTGCACCCGTCGCCACTACGCGCGGATGTGCCCGA	240				
Db	181	AGCGGGCCGGGCTGGAGGTTCGGACGCTGCACCCGTCGCCACTACGCGCGGATGTGCCCGA	240				
Qy	241	TCGAGACCCCGAGGGTCCCAACATCCGCTCTGATCGGCTCGCTCTCGTGTATGCGCGGG	300				
Db	241	TCGAGACCCCGAGGGTCCCAACATCCGCTCTGATCGGCTCGCTCTCGTGTATGCGCGGG	300				
Qy	301	TCAACCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGTGCGTGGCGGAGGCTGCA	360				
Db	301	TCAACCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGTGCGTGGCGGAGGCTGCA	360				
Qy	361	ACGAGATCCACTACCTGACCGCGACGAGAGGACCGCCACGTCGTCGGTCGCGCAGGCAACT	420				
Db	361	ACGAGATCCACTACCTGACCGCGACGAGAGGACCGCCACGTCGTCGGTCGCGCAGGCAACT	420				
Qy	421	CGCGATCGACGACAAAGGGCCGGTTTCGCGAGAGGCCGGGTGCTGGTTCGCGCGCAAGGCGG	480				
Db	421	CGCGATCGACGACAAAGGGCCGGTTTCGCGAGAGGCCGGGTGCTGGTTCGCGCGCAAGGCGG	480				
Qy	481	GCAGGTCGAGTACGTGCCCTCGTTCGAGGTGGACTACATGGACGTGTGCGCGCGCCAGA	540				
Db	481	GCAGGTCGAGTACGTGCCCTCGTTCGAGGTGGACTACATGGACGTGTGCGCGCGCCAGA	540				
Qy	541	TGCTGTGCTGGCCACCGCATGATCCCGTTCCTCGAGACGACGACGCGCAACCGTGCC	600				
Db	541	TGCTGTGCTGGCCACCGCATGATCCCGTTCCTCGAGACGACGACGCGCAACCGTGCC	600				
Qy	601	TGATGGGCGCCAAATGACAGCGCCAGCGGTTCCGCTGGTTCGCGAGGAGCGCGCTGG	660				
Db	601	TGATGGGCGCCAAATGACAGCGCCAGCGGTTCCGCTGGTTCGCGAGGAGCGCGCTGG	660				
Qy	661	TGGGCAACCGCATGGAGCTCGCGCGCGCATCGACGCGGACGTT	705				
Db	661	TGGGCAACCGCATGGAGCTCGCGCGCGCATCGACGCGGACGTT	705				

RESULT 13  
US-09-285-306-3  
; Sequence 3, Application US/09285306A  
; Publication No. US2020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gíngaras, Thomas

```
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACCGGAGACCCCTGATCAACATCGCTCCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACCGGAGACCCCTGATCAACATCGCTCCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTCTTCGGCACCGAGCGAGTGTCCAGTTCATCGACCGAGAACACCGC 120
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QY 121 TGTCCGGGCTCACCCACAAGCGCCCTGTGCGGGCTGGGGCCGGGTGCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTGCGGGCTGGGGCCGGGTGCTGTCCCGGG 180
QY 181 AGCGGGCCGGCTGGAGTTCGGACGTGCGACCGTCCACTACGGCGGAGTGTCCCGGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGGACGTGCGACCGTCCACTACGGCGGAGTGTCCCGGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGGCTGCTACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGGCTGCTACCG 360
QY 361 ACAGATTCACCTACTGACCGCGGACGAGGAGGACCGGACGTCGGTGGCGAGGCCAACT 420
Db 361 ACAGATTCACCTACTGACCGCGGACGAGGAGGACCGGACGTCGGTGGCGAGGCCAACT 420
QY 421 CGCGCATCGACGACAAGGGCCGGTTCGGCGAGGCGCCGGTCTGCTGCTGCTGCTGCTGCTG 480
Db 421 CGCGCATCGACGACAAGGGCCGGTTCGGCGAGGCGCCGGTCTGCTGCTGCTGCTGCTGCTG 480
QY 481 GCGAGGTTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAGTGTGCTGCTGCTGCTG 540
Db 481 GCGAGGTTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAGTGTGCTGCTGCTGCTG 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGACGACGACGACCGCAACCGTGGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGACGACGACGACCGCAACCGTGGCC 600
QY 601 TGATGGGCGCAACATATGACGCGCAGGCGGTTCGGCTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCAACATATGACGCGCAGGCGGTTCGGCTGGTGGCGAGGCGCGCTGG 660
QY 661 TGGGACCGGCGATGGAGTGTGCGCGCGCGATTCGACGCGGCGAGCT 705
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Db 661 TGGGACCGGCGATGGAGTGTGCGCGCGCGATTCGACGCGGCGAGCT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACCGGAGACCCCTGATCAACATCGCTCCAGTCGTGGCGG 60
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QY 61 CGATCAAGGAGTCTTCGGCACCGAGCGAGTGTCCAGTTCATGGACGAGAACACCGC 120
Db 61 CGATCAAGGAGTCTTCGGCACCGAGCGAGTGTCCAGTTCATGGACGAGAACACCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTGCGGGCTGGGGCCGGGTGCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTGCGGGCTGGGGCCGGGTGCTGTCCCGGG 180
QY 181 AGCGGGCCGGCTGGAGTTCGGACGTGCGACCGTCCACTACGGCGGAGTGTCCCGGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGGACGTGCGACCGTCCACTACGGCGGAGTGTCCCGGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATTCGGCTCGCTGCTGCTGCTGCTGCTG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATTCGGCTCGCTGCTGCTGCTGCTGCTG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGGCTGCTACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGGCTGCTACCG 360
QY 361 ACAGATTCACCTACTGACCGCGGACGAGGAGGACCGGACGTCGGTGGCGAGGCCAACT 420
Db 361 ACAGATTCACCTACTGACCGCGGACGAGGAGGACCGGACGTCGGTGGCGAGGCCAACT 420
QY 421 CGCGCATCGACGACAAGGGCCGGTTCGGCGAGGCGCCGGGTGCTGCTGCTGCTGCTGCTG 480
Db 421 CGCGCATCGACGACAAGGGCCGGTTCGGCGAGGCGCCGGGTGCTGCTGCTGCTGCTGCTG 480
QY 481 GCGAGGTTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAGTGTGCTGCTGCTGCTG 540
Db 481 GCGAGGTTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAGTGTGCTGCTGCTGCTG 540
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QY 541 TGGTGTCCGTGTCACCGCGATGATCCGTTCTTCAGACAGACGCGCACCGTGGCC 600  
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QY 541 TGGTGTCCGTGTCACCGCGATGATCCGTTCTTCAGACAGACGCGCACCGTGGCC 600  
Db |||||||  
QY 601 TGATGGGCGCCAAACATGACGAGCCAGCGGTTCCGCTGTCGCGACGAGCGCGCTGG 660  
Db |||||||  
QY 601 TGATGGGCGCCAAACATGACGAGCCAGCGGTTCCGCTGTCGCGACGAGCGCGCTGG 660  
QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGATGACGCGCGGACGT 705  
Db |||||||  
QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGATGACGCGCGGACGT 705  
Db |||||||

## RESULT 15

US-09-285-306-10  
; Sequence 10, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 10  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;  
Best Local Similarity 98.0%; Pred. No. 1.6e-152;  
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;  
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
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QY 61 CGATCAAGGAGTTCTTCCGACACCGACCGAGTGTCCAGTTATGGAACAGAACCCGC 120  
Db 61 CGATCAAGGAGTTCTTCCGACACCGACCGAGTGTCCAGTTATGGAACAGAACCCGC 120  
QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGGCGCTGGCGCTGGCGCTGGCGCTGGCTGGCTGG 180  
Db 121 TGTGGGGCTGACCCACAGCGCGCTGTGGCGCTGGCGCTGGCGCTGGCTGGCTGGCTGG 180  
QY 181 AGCGGCGCGGTGGAGGTCCGCGACGTGCACCCCTCCACTACCGCGCGATGTGCCCGA 240  
Db 181 AGCGGCGCGGTGGAGGTCCGCGACGTGCACCCCTCCACTACCGCGCGATGTGCCCGA 240  
QY 241 TCGAGACCCCGAGGAGTCCCAACATCGTCTGATCGGTTCGCTGTCGCTGATGCGCGG 300  
Db 241 TCGAGACCCCGAGGAGTCCCAACATCGTCTGATCGGTTCGCTGTCGCTGATGCGCGG 300  
QY 301 TCNACCGGTTGGGTTTCATCGAGCGCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360  
Db 301 TSAACCCGTTGGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTACCG 360  
QY 361 ACGAGATCCACTACCTGACCGCGCGAGGAGCGCGACGTGGTGGCGAGGCCAACT 420  
Db 361 ACGAGATCCACTACCTGACCGCGCGAGGAGCGCGACGTGGTGGCGAGGCCAACT 420  
QY 421 CGCCGATCGACGACAAAGGCGCGTTCCGCGAGGCCCGGGTGTGGTCCGCCCAAGCGG 480  
Db 421 CGCCGATCGACGACAAAGGCGCGTTCCGCGAGGAGKCCCGGGTGTGGTCCGCCCAAGCGG 480  
QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540

Db 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540  
QY 541 TGGTGTCCGTGTCGCGACCGCGATGATCCGTTCTTCAGACAGACGCGCACCGTGGCC 600  
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QY 601 TGATGGGCGCCAAACATGACGAGCCAGCGGTTCCGCTGTCGCGACGAGCGCGCTGG 660  
Db 601 TGATGGGCGCCAAACATGACGAGCCAGCGGTTCCGCTGTCGCGACGAGCGCGCTGG 660  
QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGATGACGCGCGGACGT 705  
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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds  
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Title: US-09-285-306-6  
Perfect score: 705  
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Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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6: /cgn2\_6/ptodata/1/ina/backfiles1.seq:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	85.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
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23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	5099	4	US-09-887-052-1

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appli
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appli
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
c 31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, App
c 32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
c 33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
35	337.2	47.8	4205	4	US-09-489-039A-30	Sequence 30, Appl
36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
37	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
41	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
42	285.2	37.6	31063	4	US-08-596-002-20	Sequence 20, Appl
43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
44	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
c 45	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App

## ALIGNMENTS

RESULT 1  
US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/797,812  
; FILING DATE: 07-FEB-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/017,765  
; FILING DATE: 15-MAY-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/629,031  
; FILING DATE: 08-APR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/012,631  
; FILING DATE: 01-MAR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/011,339  
; FILING DATE: 08-FEB-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fitts, Renee A.  
; REGISTRATION NUMBER: 35,136  
; REFERENCE/DOCKET NUMBER: 16528X-018550  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-326-2400  
; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 706 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;

Best Local Similarity 91.6%; Pred. No. 1.1e-118; Indels 0;

Matches 646; Conservative 0; Mismatches 59; Gaps 0;

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Qy 1 CCCAGAGCTGGAGGCGATCACACGACAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 2 CCCAGAGCTGGAGGCGATCACACGACAGAGCTTGATCAACATCCGCGCGTGTGCGCG 61
Qy 61 CGATCAAGAGTCTTTCGGCCACGACCGAGCTGTCCAGTTCATGACACAGAACACCGC 120
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Qy 181 AGCGGCGCGGTGGAGTTCGCGACGTCGACCCGCTCCCACTACGGCGGATGTGCCCGA 240
Db 182 AGCGTCCGCGGTGGAGTTCGCGACGTCGACCCGTCGCACTACGGCGGATGTGCCCGA 241
Qy 241 TCGAGACCCCGAGGCTCCCAACATCGTCTGATCGGCTCGCTGTGATGCGGCG 300
Db 242 TCGAACCCCTGAGGGGCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGCG 301
Qy 301 TCAACCCGTTCCGGTTTCATCAGACGCGCTACCGAAGTGTGTGCGAGGCTGTACCG 360
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Db 362 ACAGATCGTGTACCTGACCCCGACGAGGAGGACCGCACGTGTGSCACAGGCCAAAT 421
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Db 542 TGGTGTGCGTGGCCACCGCGATGATTCCTTCTCTGAGCAGACGACGCCAACCGTGCCC 601
Qy 601 TGATGGGCGCAACATGACGCGCAGGCGGTTTCGCTGTGTCGAGCGAGGCGCGGTG 660
Db 602 TCATGGGGGCAACATGACGCGCAGGCGGTTGCGCTGTGTCGAGCGAGGCGCGGTG 661
Qy 661 TGGCACCGGATGAGCTGCGCGCGGATCGACGCGGCGACGT 705
Db 662 TGGCACCGGATGAGCTGCGCGCGGATCGACGCGGCGACGT 706
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RESULT 2

US-09-103-840A-2

; Sequence 2, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

; APPLICANT: FLEISCHMAN, Robert D.

; APPLICANT: WHITE, Owen R.

; APPLICANT: FRASER, Claire M.

; APPLICANT: VENTER, John C.

; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

; TITLE OF INVENTION: TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00

; CURRENT APPLICATION NUMBER: US/09/103.840A

; CURRENT FILING DATE: 1998-06-24

; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 2

; LENGTH: 4403765

; TYPE: DNA

; ORGANISM: Mycobacterium tuberculosis

; FEATURE:

; OTHER INFORMATION: CDC 1551

; OTHER INFORMATION: "n" bases at various positions throughout the sequence

; OTHER INFORMATION: represent a, t, c or g

US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;

Best Local Similarity 91.4%; Pred. No. 1.2e-116; Indels 0;

Matches 639; Conservative 0; Mismatches 60; Gaps 0;

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Qy 1 CCCAGAGCTGGAGGCGATCACACGACAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 762963 CCCAGAGCTGGAGGCGATCACACGACAGAGCTTGATCAACATCCGCGCGTGTGCGCG 763022
Qy 61 CGATCAAGAGTCTTTCGGCAACAGCCAGCTGTCCAGTTCATGACACAGAACACCGC 120
Db 763023 CGATCAAGAGTCTTTCGGCAACAGCCAGCTGAGCCAAATTCATGACACAGAACACCGC 763082
Qy 121 TGTGGGCTCACCACAGCGCCCTGTGCGGCTGGGCGCGGTGTCTGTCCCGG 180
Db 763083 TGTGGGCTTGACCCACAGCGCGACTGTGCGGCTGGGCGCGGTGTCTGTGACGTG 763142
Qy 181 AGCGGCGCGGTGGAGTTCGCGACGTCGACCCGCTCCCACTACGGCGGATGTGCCCGA 240
Db 763143 AGCGTCCGCGGTGGAGTTCGCGACGTCGACCCGTCGCACTACGGCGGATGTGCCCGA 763202
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Db 763203 TCGAAAACCCCTGAGGGGCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGCGG 763262
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Qy 361 ACAGATCCACTACCTGACCCCGACGAGGAGGACCGCCACGTGTGTCGCGAGGCCAACT 420
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Qy 481 GCGAGTCTGAGTACGTGCTGCTCGTCGAGGTGGAATACATGAGCTGTGTCGCGCGCAGA 540
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Db 763563 TCATGGGGGCAACATGACGCGCAGGCGGTTGCGCTGTGTCGAGCGAGGCGCGGTG 763622
Qy 661 TGGCACCGGATGAGCTGCGCGCGGATCGACGCGG 699
Db 763623 TGGCACCGGATGAGCTGCGCGCGGATCGACGCGG 763661
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RESULT 3

US-09-103-840A-1

; Sequence 1, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:



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; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; TYPE: DNA
; LENGTH: 4411529
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116; Mismatches 0; Indels 0; Gaps 0;
Matches 639; Conservative 0;

QY 1 CCCAGGAGCTGGAGGCGATCACACGCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 761003 CCCAGGAGCTGGAGGCGATCACACGCGCAGACCGTGTATCAACATCCGCGCGGTGGTGGCG 761062

QY 61 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACACAGAACACCCGC 120
Db 761063 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACACAGAACACCCGC 761122

QY 121 TGTGGGGCTCACCCACAGCGCCCTGTGTGGCGCTGGCGCGGTGTGTCTGCCGG 180
Db 761123 TGTGGGGCTTACCCACAGCGCCCTGTGTGGCGCTGGCGCGGTGTGTCTGCCGG 761182

QY 181 AGCGGCGCGGTGTGGAGTCCGCGACGTGCACCCGTCCCACTACGCGCGGATGTCCCGA 240
Db 761183 AGCGGCGCGGTGTGGAGTCCGCGACGTGCACCCGTCCCACTACGCGCGGATGTCCCGA 761242

QY 241 TCGAGACCCCGAGGGTCCAAATCATCGTCTGATCGGCTCGTGTGGTGTATGGCGGG 300
Db 761243 TCGAAACCCCTGAGGGGCGCAACATCGTCTGATCGGCTCGTGTGGTGTATGGCGGG 761302

QY 301 TCAACCCGTTCCGGTTTCATCGAGAGCCGTACCGCAAGGTGTGCACGCGGTGTACCG 360
Db 761303 TCAACCCGTTCCGGTTTCATCGAAACGCGGTACCGCAAGGTGTGCACGCGGTGTACCG 761362

QY 361 ACAGATCCACTACCTGACCGCGCAGAGGAGCGCCACCTGTGTGGCGAGGCAACT 420
Db 761363 ACAGATCGTGTACTGTACCGCGCAGAGGAGCGCCACCTGTGTGGCGAGGCAACT 761422

QY 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTGTGTCCCGCGCAAGCGG 480
Db 761423 CGCCGATCGATCGGACGCTGCTTTCGTTCGAGCGCGGTTGTGTTCGCGCAAGCGG 761482

QY 481 GCGAGGTGAGTACGTCCTGTTCGAGGTGGAATCATGACGCTGTTCGCGCGCCAGA 540
Db 761483 GCGAGGTGAGTACGTCCTGTTCGAGGTGGAATCATGACGCTGTTCGCGCGCCAGA 761542

QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGTGGCC 600
Db 761543 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGTGGCC 761602

QY 601 TGAATGGCGCCAAATGACAGCGCCAGCGGTTTCGCTGTGTGTGCGAGAGGCGCGCTGG 660
Db 761603 TCAATGGGCGCAAAATGACAGCGCCAGCGGTTTCGCTGTGTGTGCGAGAGGCGCGCTGG 761662

QY 661 TGGGACCGGATGAGCTGCGCGCGGATGACGCGG 699
Db 761663 TGGGACCGGATGAGCTGCGCGCGGATGACGCGG 761701
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RESULT 4

US-08-313-185-57

```

; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57
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Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCACACGCGACCCCTGATCAACATCCGTCACATCGTGGCGG 60
Db 1124 CCCAGGAGCTGGAGGCGATCACACGCGACCGAGCGCTGATCAATATCCGTCGCGTGGTGGCGG 1183

QY 61 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGGACAGAACACCCGC 120
Db 1184 CTATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGGATCAGAACACCCCTC 1243

QY 121 TGTGGGCTCACCACCAAGGCGCGCTGTTCGGCGCTGGGCGCGGTGTGTCTGTCCCGG 180
Db 1244 TGTGGGCTCACCACCAAGGCGCGCTGTTCGGCGCTGGGCGCGGTGTGTCTGTCTGTG 1303

QY 181 AGCGGCGCGGCTCGAGGTCCGCGACGTGCACCGCTCCCACTAGCGCGGATGTGCCGA 240
Db 1304 AGCGTGGCGGCTAGAGGTCCGTCGTCGTCACCTTCGCACTAGCGCGGATGTGCCGA 1363

QY 241 TCGAGACCCCGAGGTTCCCAACATCGCTGTGATCGGCTCGCTGTCTGTGTGTGTGTGT 300
Db 1364 TCGAGACTCCGAGGGGCGCGAATAGGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1423

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGGTACCGCAAGGTGTGTGTGTGTGTGTGTGTGTGT 360
Db 1424 TCAACCCGTTCCGGTTTCATCGAAACACCGTACCGCAAGGTGTGTGTGTGTGTGTGTGTGTGT 1483
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QY 361 ACAGATCCACTACTCTGACCGCCGACGAGGAGCCGCCACGTGGTGGCGAGGCCAACT 420
Db 1484 ACGAGATCGAATACTTGACCGCTGACGAGGAGACCGCCCATGTCTGTGGCGAGGCCAACT 1543
QY 421 CGCGATCGACGACAAAGGGCGGTTCGCGGAGGCCCGGGTCTGTCTCCGCGCAAGGCGG 480
Db 1544 CGCGATCGACGAGGCCCGGCTTCTCGAGCGCGCTGTGGTGGCGCGCAAGGCGG 1603
QY 481 CGGAGTCCAGTACGTGCTCCCTCGCCGAGTGGACTACATGAGCTGTCGCGCGCCAGA 540
Db 1604 CGGAGTCCAGTACGTGCTCCCTCGCCGAGTGGACTACATGAGTGTCTCGCCAGCCAGA 1663
QY 541 TGGTGTCCGTGGCCACCGCCGATGATCCCGTTCTCGAGCAGCAGACGCCAACCGTGGCC 600
Db 1664 TGGTGTCCGTGGCCACCGCCGATGATCCCGTTCTCGAGCAGCAGACGCCAACCGTGGCC 1723
QY 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTCGCTGGTGGCGAGAGCGCGGTGG 660
Db 1724 TGATGGGCGCTAAATGACGAGCCAGCGGTTCGCTGGTGGCGAGAGCGCGGTGG 1783
QY 661 TGGGACCGGATGAGCTGCGCGCGCGATCGAGCGG 699
Db 1784 TGGGTACCGGTATGAGTTGCGCGCGCCATCGACGCTG 1822
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## RESULT 5

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US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082,614A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
```

```
TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57
Query Match 79.2%; Score 558.2; DB 3; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;
QY 1 CCAGGACGTGGAGGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGGTGGCGG 60
Db 1124 CCAGGACGTGGAGGGATCACACCGCAGACCCCTGATCAATATCCGTCGCGGTGGTGGCGG 1183
QY 61 CGATCAAGAGTTCCTTCGCGCACCAGCCAGCTGTCCAGTTTCATGGACAGAAACACCCGC 120
Db 1184 CTATCAAGGAATTCCTTCGCGCACCAGCCAGCTGTCCAGTTTCATGGATCAGAAACCCCTC 1243
QY 121 TGTGCGGGCTACCCACAAGCGCGCTGTTCGGGGTGGGCGCGGGTGGTGTCTCCCGGG 180
Db 1244 TGTGCGGGCTTACCCACAAGCGCGCTGTTCGGGGTGGGCGCGGGTGGTGTCTCCCGGG 1303
QY 181 AGCGGGCGGGCTGGAGGTCGCGAGCTGCAACCGCTCCCACTACGGCGCGATGTGCCCGA 240
Db 1304 AGCGTCCGGGCTAGAGTCCGTCAGTGCACCTTCGCACTACGGCGCGATGTGCCCGA 1363
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCCGGG 300
Db 1364 TCGAGACTCCGAGGGGCCGAAACATAGGTCTGATCGGTTCAATGTCGTTGATCGCGGG 1423
QY 301 TCAACCGGTTCCGGTTTCATCGAGACCGCGTACCGAAGTGGTTCGACGGCGTGTCAACCG 360
Db 1424 TCAACCGCTTCCGGTTTCATCGAAGACCCGTACCGCAAGTGGTTCGACGGTGTGTCAACCG 1483
QY 361 ACAGATCCACTACTCGACCGCGCAGGAGGAGCCGACCGTGGTGGCGCAGGCCAACT 420
Db 1484 ACAGATCGAATCTTACCGCTGACGAGGAAGACCGCCATGTCTGTGGCGAGGCCAACT 1543
QY 421 CGCGATCGACGACAAAGGGCGGTTCGCGAGGCGCGGGTGTGTGTTCGCGCAAGCGG 480
Db 1544 CGCGATCGACGAGGCGCGCGCTTCTCGAGCGCGCGTGTGGTGGCGCGCAAGCGG 1603
QY 481 CGGAGTCCAGTACGTGCTCCCTCGAGAGTGGACTACATGAGCTGTCGCGCGCCAGA 540
Db 1604 CGGAGTGGAGTACGTGGCTTCGTCGAGGTGGATTATACATGGATGTCTCGCCACGCCAGA 1663
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGGCC 600
Db 1664 TGGTGTCCGTGGCCACCGCGATGATTCCTGTTCTTGAGCAGCAGCAGCCAAACCGTGGCC 1723
QY 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTCGCTGGTGGCGAGGCGCGGTGG 660
Db 1724 TGATGGGCGCTAAATGACGAGCCAGCGGTTCGCTGGTGGCGAGGAGCGCGGTGG 1783
QY 661 TGGGACCGGATGAGCTGCGCGCGCGGATCGAGCGG 699
Db 1784 TGGGTACCGGTATGAGTTGCGCGCGCCATCGACGCTG 1822
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## RESULT 6

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US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
```

;; ZIP: 55402  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: PatentIn Release #1.0, Version #1.25  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/250,030  
;; FILING DATE: 26-MAY-1994  
;; CLASSIFICATION: 435  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Muetting, Ann M.  
;; REGISTRATION NUMBER: 33,977  
;; REFERENCE/DOCKET NUMBER: 150.105U51  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 612-339-3061  
;; INFORMATION FOR SEQ ID NO: 1:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 970 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA  
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;  
Best Local Similarity 91.1%; Pred. No. 5e-104;  
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy	1	CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG	60
Db	341	CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG	400
Qy	61	CGATCAAGGAGTTCTTCGGCACCAGCAGTGTCCAGTTCATGACCAAGCAACACCGCG	120
Db	401	CGATCAAGGAGTTCTTCGGCACCAGCAGTGTCCAGTTCATGACCAAGCAACACCGCG	460
Qy	121	TGTCGGGCTCACCCAAAGCGCCCTGTTCGGGCTGGGCGCGGGTGTGTCTCCCGG	180
Db	461	TGTCGGGCTTACCCCAAGCGCCGACTGTTCGGGCTGGGCGCGGGTGTGTCTCCCGG	520
Qy	181	AGCGGGCCGGCTGGAGTTCGGCAGCTGCACCCCTCCACTACGGCCGGATGCCCCGA	240
Db	521	AGCGTCCCGGGCTGGAGGCGGACCTGCACCCCTCCACTACGGCCGGATGCCCCGA	580
Qy	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCGCGG	300
Db	581	TCGAAAACCCCTGAGGGGCGCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCGCGG	640
Qy	301	TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGAAGGTGGTTCGACCGCGTGTACCG	360
Db	641	TCAACCCGTTCCGGTTTCATCGAAGCGCGTACCGAAGGTGGTTCGACCGCGTGTACCG	700
Qy	361	ACGAGATCCACTACCTGACCCCGCAGGAGGACCGCCACTGTCGTGGCGCAGGCGCACT	420
Db	701	ACGAGATCCACTACCTGACCCCGCAGGAGGACCGCCACTGTCGTGGCGCAGGCGCACT	760
Qy	421	CGCCGATCGACGACAAAGGCGGTTTCGGAGGCGCCGGTGTGTGTCGCCCGCAAGGCGG	480
Db	761	CGCCGATCGATCGGACCGGTTCGTCGAGCGCGGCTGTGTGTCGCCCGCAAGGCGG	820
Qy	481	CGGAGGTTCGAGTACGTGTCCTCGTCCGAGGTGGACTACATGACGAGTCTCGCCCGCCAGA	540
Db	821	CGGAGGTTCGAGTACGTGTCCTCGTCCGAGGTGGACTACATGACGAGTCTCGCCCGCCAGA	880
Qy	541	TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAAGACGACGCGGATGCGCC	600
Db	881	TGGTGTCCGTGGCCACCGCGATGATTCCTTCTTCGAGCAAGACGACGCGGATGCGCC	940
Qy	601	TGATGGGCGCCAAATGACGCGCCAGGCGG	630
Db	941	TCATGGGGGCAAAATGACGCGCCAGGCGG	970

RESULT 7  
PCT-US95-06790-1  
; Sequence 1, Application PC/TUS9506790  
; GENERAL INFORMATION:  
; APPLICANT: Mayo Foundation for Medical Education and Research  
; APPLICANT: and Hoffmann-La Roche Inc.  
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Schwegman, Lundberg & Woessner  
; STREET: 3500 IDS Center  
; CITY: Minneapolis  
; STATE: MN  
; COUNTRY: USA  
; ZIP: 55402  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US95/06790  
; FILING DATE: 26-MAY-1995  
; CLASSIFICATION:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Raasch, Kevin W.  
; REGISTRATION NUMBER: 35,651  
; REFERENCE/DOCKET NUMBER: 150.105WO1  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 612-339-0331  
; TELEFAX: 612-339-3061  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 970 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
PCT-US95-06790-1

Query Match 76.7%; Score 540.4; DB 5; Length 970;  
Best Local Similarity 91.1%; Pred. No. 5e-104;  
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy	1	CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG	60
Db	341	CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG	400
Qy	61	CGATCAAGGAGTTCTTCGGGCAACAGCCAGCTGTCCAGTTCATGACCAAGCAACACCGCG	120
Db	401	CGATCAAGGAGTTCTTCGGGCAACAGCCAGCTGTCCAGTTCATGACCAAGCAACACCGCG	460
Qy	121	TGTCGGGCTCACCCAAAGCGCCCTGTTCGGGCTGGGCGCGGGTGTGTCTCCCGG	180
Db	461	TGTCGGGTTGACCCCAAGCGCGCTGTTCGGGCTGGGCGCGGGTGTGTCTCCCGG	520
Qy	181	AGCGGGCCGGCTGGAGTTCGGGCAACAGCCAGCTGCACCCCTCCACTACGGCCGGATGCCCCGA	240
Db	521	AGCGTCCCGGGCTGGAGGCGGACCTGCACCCCTCCACTACGGCCGGATGCCCCGA	580
Qy	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCGCGG	300
Db	581	TCGAAAACCCCTGAGGGGCGCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCGCGG	640
Qy	301	TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGAAGGTGGTTCGACCGCGTGTACCG	360
Db	641	TCAACCCGTTCCGGTTTCATCGAAGCGCGTACCGAAGGTGGTTCGACCGCGTGTACCG	700
Qy	361	ACGAGATCCACTACCTGACCCCGCAGGAGGACCGCCACTGTCGTGGCGCAGGCGCACT	420

Db 701 ACGAGATCGTGTACTGACCCGCGCAGAGAGGACCCGCCACGTCGTGTGGCAGACGCCCAATT 760  
Qy 421 CGCCGATCGACGACAAGGCGCGGTTCGCGGAGGCCCGGGTGTGTGTCGCGCGCAAGGCGG 480  
Db 761 CGCCGATCGATGCGGACGGTTCGTTCGTGAGCGCGCGTGTGTGTCGCGCGCAAGGCGG 820  
Qy 481 GCGAGGTGAGTACGTCGCTCGTCCGAGGTGGACTACATGAGAGTGTTCGCGCGGCCAGA 540  
Db 821 GCGAGGTGAGTACGTCGCTCGTCCGAGGTGGACTACATGAGAGTGTTCGCGCGGCCAGA 880  
Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTCGACGACGACGACCGCAACCGTGCCC 600  
Db 881 TGGTGTGCGTGGCCACCGCGATGATTCCTCTTCTTGGAGCAGCAGACGCCCAACCGTGCCC 940  
Qy 601 TGATGGGCGCCAAACATGACGCGCAGGCGG 630  
Db 941 TCATGGGGGCAACATGACGCGCCAGGCGG 970  
RESULT 8  
US-08-757-653-135  
; Sequence 135, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-135  
Query Match 75.2%; Score 530.4; DB 2; Length 620;  
Best Local Similarity 91.0%; Pred. No. 5.8e-102;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
Qy 36 ATCAACATCCGTCAGTCGTGCGCGGATCAAGAGTTCTTCGCGCACCGACGCTGTCC 95  
Db 1 ATCAACATCCGCGCGTGTGTCGCGGATCAAGAGTTCTTCGCGCACCGACGCTGAGC 60  
Qy 96 CAGTTCATGGACCGAGAACACCGCTGTGCGGGCTCACCCACAGCGCGCTTCGCGG 155  
Db 61 CAATTCATGGACCGAGAACACCGCTGTGCGGGTTGACCCCAAGCGCGGCTGTGCGG 120

Qy 156 CTGGGCCCGGTGTGTCTGTCCTCGGAGCGCGGCTGAGGTCCTCGAGCGTCGACCCG 215  
Db 121 CTGGGGCCCGCGGTGTGTCTGTCAGTGAGCGTGTGCGGGTGTGAGGTCCTCGAGCGTCGACCCG 180  
Qy 216 TCCACTACGCGCGGATGTGCTCCGATCGAGACCCGAGGGTCCCAACATCGGTCGTGATC 275  
Db 181 TCGCACTACGCGCGGATGTGCTCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCGTGATC 240  
Qy 276 GGCTCGCTGTGCTGTATGTCGCGGGTCAACCCGTTCTGGGTTTCATCGAGAGCGCGTACCGC 335  
Db 241 GGCTCGCTGTGCTGTATGTCGCGGGTCAACCCGTTCTGGGTTTCATCGAAACCGCGTACCGC 300  
Qy 336 AAGTGTGTTCGACGCGGTGTGTCACGACGAGATCCACTACCTGACCGCGCGAGGAGGAC 395  
Db 301 AAGTGTGTTCGACGCGGTGTGTCGACGAGATCGTGTACTGACCGCGCGAGGAGGAC 360  
Qy 396 CGCCACGTGTGCGCAGGCGCAACTCGCCGATCGACGACAAAGGGCCGGTTTCGCGGAGGCC 455  
Db 361 CGCCACGTGTGCGCAGGCGCAACTCGCCGATCGATCGGACGCGTCTGTCGAGCGC 420  
Qy 456 CGGTGTGTGTCGCGCGCAAGGCGGCGAGTACGTACGTCGCTCGTCCGAGGTGAC 515  
Db 421 CGGTGTGTGTCGCGCGCAAGGCGGCGAGTACGTACGTCGCTCGTCCGAGGTGAC 480  
Qy 516 TACATGAGACGTGTGCGCGCGCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTC 575  
Db 481 TACATGAGACGTGTGCGCGCGCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTC 540  
Qy 576 GAGCAGCAGCAGCCAAACCGTGCCTGATGGGCGCCAAACATGAGCGCCAGGGGGTTCCG 635  
Db 541 GAGCAGCAGCAGCCAAACCGTGCCTCATGGGGGCAAAACATGAGCGCCAGGGGGTTCGCG 600  
Qy 636 CTGCTGCGCAGCGAGGCGCC 655  
Db 601 CTGCTGCGTAGCGAGGCGCC 620  
RESULT 9  
US-08-757-653-138/c  
; Sequence 138, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-138



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Db      601 CTGTCGTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db      |||
Db      620 ATCAACATCCGCGCGGTGTCGCGGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 561
Qy      96 CAGTTCATGGACCAAGAACCCGCTGTGCGGGTCAACCAAGACGCGCTGTGCGCG 155
Db      |||
Db      560 CAATTATGACCAAGAACCCGCTGTGCGGGTTGACCCACAAAGCGCGACTGTGCGCG 501
Qy      156 CTGGGCGCGGTGTGTCTGTCGCGGAGCGCGCGCTGGAGTTCCGGAGCTGCACCG 215
Db      |||
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Qy      216 TCCCACTACGCGCGGATGTGCGCGATCGAGACCCGCGGAGTTCCCAACATCGGTCTGATC 275
Db      |||
Db      440 TCGCACTACGCGCGGATGTGCGCGATCGAACCCTCTGAGGGGCCCAACATCGGTCTGATC 381
Qy      276 GGCTCGCTGTGCGGTGTATGCGCGGTCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGC 335
Db      |||
Db      380 GGCTCGCTGTGCGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAGACGCCGTACCGC 321
Qy      336 AAGGTGTCGACGCGGTGTTACCGACGAGATCACTACCTGACCGCGCGAGGAGGAC 395
Db      |||
Db      320 AAGGTGTCGACGCGGTGTTAGCGACGAGATCTGTACTTGTGACCGCGCGAGGAGGAC 261

Qy      396 CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGCCCGGTTTCGCGGAGGCC 455
Db      |||
Db      260 CGCCACGTGTGGCACAGGCCAATTGCGCCGATCGATCGGACGGTTCGTTCTGTCGAGCCG 201
Qy      456 CGGGTGTGTGTCGCGCCGCAAGGGCGGAGGTGAGTACGTGCGCTCTGTCGAGGTGAGC 515
Db      |||
Db      200 CGCGTGTGTCGCGCCGCAAGGGCGGAGGTGAGTACGTGCGCTCTGTCGAGGTGAGC 141
Qy      516 TACATGACGTGTGCGCGCGCCAGATGTTGCGTGGCCACCGGATGATCCCGTTCCTC 575
Db      |||
Db      140 TACATGACGTGTGCGCGCGCCAGATGTTGCGTGGCCACCGGATGATTCCTTCTCTG 81
Qy      576 GAGCACGACGACGCCAACCCGTCCTCATGATGGGCGCCAAACATGACGCGCCAGCGGTTCCG 635
Db      |||
Db      80 GAGCACGACGACGCCAACCCGTCCTCATGATGGGCGCCAAACATGACGCGCCAGCGGTTCCG 21
Qy      636 CTGTCGCGCAGCGAGGCCGCC 655
Db      |||
Db      20 CTGTCGCTAGCGAGGCCCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db      |||
Db      1 ATCAACATCCGCGCGGTGTCGCGGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 60
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QY 96 CAGTTTCATGACAGAGAACCGCTGTCTGGGGCTCACCCACAAGCGCGCTGTCTGGCG 155  
Db 61 CAATTTCATGACAGAGAACCGCTGTCTGGGGTTGACCCACAAGCGCGCTGTCTGGCG 120  
QY 156 CTGGGCGCGGGTGTCTGTCCGGAGAGCGGGCGGGCTGAGGTCCGCGACGTGCACCG 215  
Db 121 CTGGGCGCGGGTGTCTGTCACTGAGCTGCGGGCTGAGGTCCGCGACGTGCACCG 180  
QY 216 TCCCACTACGCGCGGATGTCGCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275  
Db 181 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240  
QY 276 GCTCGCTGTCTGGTGTATGCGCGGGTCAACCGCTTCGGGTTTCATCGAGACGCGTACCG 335  
Db 241 GCTCGCTGTCTGGTGTATGCGCGGGTCAACCGCTTCGGGTTTCATCGAAACGCGTACCG 300  
QY 336 AAGGTGTGTACGCGGGTGTACCCAGAGATCCACTACTGACCGCGCGACGAGGAGGAC 395  
Db 301 AAGGTGTGTACGCGGGTGTAGCGACGAGATCGTGTACTGACCGCGACGAGGAGGAC 360  
QY 396 CGCCACGTGTGGCGAGGCCAACTCGCGGATCGACGACAAAGGCGGGTTCGCGAGGCG 455  
Db 361 CGCCACGTGTGGCGAGGCCAACTCGCGGATCGATCGGACGGTTCGTTCTGTCGAGCG 420  
QY 456 CGGGTGTGTGGCGGAGGCGGGCGAGGTGAGTACGTGCTTCTGTCGAGGTGAC 515  
Db 421 CGCGTGTGTGGCGGAGGCGGGCGAGGTGAGTACGTGCTTCTGTCGAGGTGAC 480  
QY 516 TACATGGAGCTGTCTGCGCGCGCAGATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTC 575  
Db 481 TACATGGAGCTGTCTGCGCGCGCAGATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTC 540  
QY 576 GAGCAGCAGCAGCCAACTGCTGATGGCGCCAAACATGAGCGCGCGGTTCCG 635  
Db 541 GAGCAGCAGCAGCCAACTGCTGATGGCGCCAAACATGAGCGCGCGGTTCCG 600  
QY 636 CTGGTGGCAGGAGCGCGC 655  
Db 601 CTGGTGGTGGCAGGAGCGCGC 620

## RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; OLIVE, DAVID M.

; LYAMICHEV, VICTOR I.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN &amp; CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent in Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: &lt;Unknown&gt;

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

## TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

## Query Match

Best Local Similarity 75.2%; Score 530.4; DB 4; Length 620;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCCTGTCAGTCTGTGCGCGCGATCAAGGAGTCTTCGCGCACCGAGCTGTCC 95  
Db 620 ATCAACATCCCGCGGTGTGTCGCCGATCAAGAGTCTTCGCGCACCGAGCTGTGAC 561  
QY 96 CAGTTTCATGACAGAACAAACCGCTGTCTGGGGTCAACCCAAAGCGCGCTGTCTGGCG 155  
Db 560 CAATTTCATGACAGAACAAACCGCTGTCTGGGGTTCACCCAAAGCGCGCTGTCTGGCG 501  
QY 156 CTGGGCGCGGGTGTCTGTCTCCGGGAGCGCGCGGGCTGGAGGTCCGCGACGTGCACCG 215  
Db 500 CTGGGCGCGGGTGTCTGTCTACGTGAGCGTCTCCGGGGTGGAGGTCCGCGACGTGCACCG 441  
QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275  
Db 440 TCGCACTACGCGCGGATGTGCCGATCGAACCCTGAGGGGCCCAACATCGTCTGATC 381  
QY 276 GGCTCGCTGTCTGGTGTATGTCGCGGGTCAACCCGTTTCGGGTTTCATCGAGACGCGTACCG 335  
Db 380 GGCTCGCTGTCTGGTGTATGTCGCGGGTCAACCCGTTTCGGGTTTCATCGAAGCGCGTACCG 321  
QY 336 AAGTGTGTGACGCGGGTGTCAACGATCGAGATCCACTACCGCGCGAGGAGGAC 395  
Db 320 AAGTGTGTGACGCGGGTGTAGCGACGAGATCGTGTACCTGACCGCGCGAGGAGGAC 261  
QY 396 CGCCACGTGTGGCGCGAGGCCAACTCGCCGATCGACGACAAAGGGCGGTTCGCGAGCGC 455  
Db 260 CGCCACGTGTGGCGCGAGGCCAACTCGCCGATCGATCGGAGCGGTCTGTCGAGCGC 201  
QY 456 CGGGTGTGTCTGCGCGCAAGCGCGGCGAGGTTCAGGTACGTGCGCTTCGCGAGGTGGAC 515  
Db 200 CGCGTGTGTCTGCGCGCAAGCGCGGCGAGGTTCAGGTACGTGCGCTTCGCGAGGTGGAC 141  
QY 516 TACATGAGACGTGTCTGCGCGCGCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 575  
Db 140 TACATGAGACGTGTCTGCGCGCGCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 81  
QY 576 GAGCAGCAGCAGCCAAACCGTGTGATGGCGCGCAACATGAGCGCGAGCGGTTCG 635  
Db 80 GAGCAGCAGCAGCCAAACCGTGTGATGGCGCGCAACATGAGCGCGAGCGGTTCG 21  
QY 636 CTGGTGGCGAGGAGCGCGC 655  
Db 20 CTGGTGGTGGCGAGGAGCGCGC 1

## RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable PEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190



```
;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
;
; US-08-757-653-136
;
; Query Match 75.0%; Score 528.8; DB 2; Length 620;
; Best Local Similarity 90.8%; Pred. No. 1.3e-101;
; Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;
;
; QY 36 ATCAACATCCGTCAGTCGTCGGCGCGATCAAGAGAGTTCTTCGGCACCGACCGCTGTCCGC 95
; DB 1 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGAGTTCTTCGGCACCGACCGCTGTCCGC 60
;
; QY 96 CAGTTTCATGGACCAAGAAACCCGCTGTCGGGGCTCACCCACAGCGCGCTGTCCGC 155
; DB 61 CAATTTCATGGACCAAGAAACCCGCTGTCGGGGTTGACCTCAAGCGCGCGACTGTCCGC 120
;
; QY 156 CTGGGCCCGGGTGTCTGTCGGGAGCGCGGCTGAGGTCGCCAGCGCTGCACCG 215
; DB 121 CTGGGGCCCGCGGTCTGTACGTGAGCTGCCGGGCTGGAGTCCCGACGTCACCG 180
;
; QY 216 TCCCACTACGGCCGGATGTGCCCGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 275
; DB 181 TCGCACTACGGCCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
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; QY 276 GGCTCGCTGTGGTGTATGCGGGTCAACCCGTTCCGGTTTCATCGAGACCGCTACCG 335
;
; Query Match 75.0%; Score 528.8; DB 2; Length 620;
; Best Local Similarity 90.8%; Pred. No. 1.3e-101;
; Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;
;
; QY 36 ATCAACATCCGTCAGTCGTCGGCGCGATCAAGAGAGTTCTTCGGCACCGACCGCTGTCCGC 95
; DB 1 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGAGTTCTTCGGCACCGACCGCTGTCCGC 60
;
; QY 96 CAGTTTCATGGACCAAGAAACCCGCTGTCGGGGCTCACCCACAGCGCGCTGTCCGC 155
; DB 61 CAATTTCATGGACCAAGAAACCCGCTGTCGGGGTTGACCTCAAGCGCGCGACTGTCCGC 120
;
; QY 156 CTGGGCCCGGGTGTCTGTCGGGAGCGCGGCTGAGGTCGGCGAGTCGACCG 215
; DB 121 CTGGGGCCCGCGGTCTGTACGTGAGCTGCCGGGCTGGAGTCCCGACGTCACCG 180
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; QY 216 TCCCACTACGGCCGGATGTGCCCGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 275
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;
; QY 276 GGCTCGCTGTGGTGTATGCGGGTCAACCCGTTCCGGTTTCATCGAGACCGCTACCG 335
; DB 241 GGCTCGCTGTGGTGTATGCGGGTCAACCCGTTCCGGTTTCATCGAAACCGCTACCG 300
;
; QY 336 AAGTGTGTGACGGCGGTGTCACCGACGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
; DB 301 AAGTGTGTGACGGCGGTGTTAGCGACGAGATCGTGACCTGACCGCGACGAGGAC 360
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; QY 396 CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGACGACGAGGCGGTTTCGCGAGGCC 455
; DB 361 CGCCACGTGGTGGCACAGGCCAAATTCGCGCGATCGATGCGGACGCTGCTTCGAGCGC 420
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; QY 456 CGGTGTCTGTTCGCGCGCAAGCGCGGCGAGTTCGAGTACGTGCCCTGTCGAGGTGGAC 515
; DB 421 CGGTGTCTGTTCGCGCGCAAGCGCGGCGAGTTCGAGTACGTGCCCTGTCGAGGTGGAC 480
;
; QY 516 TACATGACGTGTTCGCGCGCGCAGATGTTGCGGTGGCCACCGCGATGATCCCGTTCTCTC 575
; DB 481 TACATGACGTGTTCGCGCGCGCAGATGTTGCGGTGGCCACCGCGATGATTCCTTCTCTG 540
;
; QY 576 GAGCACGACGACGCCAAACCGTGTCCCTGTATGGGCGGCCAAACATGACAGCGCGGTTCCG 635
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; 541 GAGCACGACGACGCCAAACCGTTCGCTCATGGGGGCAAAACATGACGCGCCAGCGGTGCCG 600
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; QY 636 CTGGTGCAGCGAGGAGCGCC 655
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; DB 601 CTGGTCCGTAGCGAGGCC 620
;
; RESULT 15
; US-08-757-653-137
; Sequence 137, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
;
; US-08-757-653-137
;
; Query Match 75.0%; Score 528.8; DB 2; Length 620;
; Best Local Similarity 90.8%; Pred. No. 1.3e-101;
; Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;
;
; QY 36 ATCAACATCCGTCAGTCGTCGGCGCGATCAAGAGAGTTCTTCGGCACCGACCGCTGTCCGC 95
; DB 1 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGAGTTCTTCGGCACCGACCGCTGTCCGC 60
;
; QY 96 CAGTTTCATGGACCAAGAAACCCGCTGTCGGGGCTCACCCACAGCGCGCTGTCCGC 155
; DB 61 CAATTTCATGGACCAAGAAACCCGCTGTCGGGGTTGACCCACAGCGCGCTGTCCGC 120
;
; QY 156 CTGGGCCCGGGTGTCTGTCGGGAGCGCGGCTGAGGTCGCCAGCGCTGCACCG 215
; DB 121 CTGGGGCCCGCGGTCTGTACGTGAGCTGCCGGGCTGGAGTCCCGACGTCACCG 180
;
; QY 216 TCCCACTACGGCCGGATGTGCCCGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 275
; DB 181 TCGCACTACGGCCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
;
; QY 276 GGCTCGCTGTGGTGTATGCGGGTCAACCCGTTCCGGTTTCATCGAGACCGCTACCG 335
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Db	241	GGCTGCTGTCGTGTACGGCGGGTCAACCCGTTCCGGGTTTCATCGAAACGCCGTACCGC	300
Qy	336	AAGTGGTCGACGGCGTGTGTACCGACGAGATCCACTACCTGACCGCCCAACGAGGAGGAC	395
Db	301	AAGGTGTCGACGGCGTGTGTAGCGACGAGATCGTGTACCTGACCGCCCAACGAGGAGGAC	360
Qy	396	CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGAGCAAGGGCGCGTTCCGGGAGGCC	455
Db	361	CGCCACGTGGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGGTTCGTCGAGCCG	420
Qy	456	CGGGTGTGCTGGTCCGCCGCAAGGCGGCGGAGGTGAGTACGTGCTCCCTTCGTCGAGGTGGAC	515
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Qy	516	TACATGGACGTGTGCGCCGCGCAGATGTTGTCGGTGGCCACCGCGATGATCCCGTTCCTC	575
Db	481	TACATGGACGTCTCGCCCGCGCAGATGTTGTCGGTGGCCACCGCGATGATCCCTTCCTG	540
Qy	576	GAGCAGCAGCAGCCCAACCGTCCCTGATGGGGGCCAACATGACGCGCCAGGCGGTTCG	635
Db	541	GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCCAAACATGACGCGCCAGGCGGTTCG	600
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Search completed: August 24, 2005, 22:24:46  
Job time : 114.459 secs

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Result No.	Score	Query #		DB	ID	Description
		Match	Length			
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2	705	100.0	705	9	US-09-285-306-5	Sequence 5, Appli
3	705	100.0	705	9	US-09-285-306-6	Sequence 6, Appli
4	705	100.0	705	9	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	9	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	9	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	9	US-09-285-306-10	Sequence 10, Appli
8	705	100.0	705	9	US-09-285-306-11	Sequence 11, Appli
9	705	100.0	705	9	US-09-285-306-12	Sequence 12, Appli

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RESULT 1
US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication NO. US2002018467A1
; GENERAL INFORMATION:
; APPLICANT: Ginetas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 191
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-4

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.



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Qy 1 CCCAGGACGTGAGGCGATCAACCCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGAGGCGATCAACCCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACCCAGCCAGCTGTCCAGTTTCATGACAGACCAACCCGC 120
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Db 121 TGTCCGGGCTACCCACAAGCCCGCTGTTCGGCCCTGGCCCGGGTGGTCTGTCCCGG 180
Qy 181 AGCGGGCCGGGCTGAGGTTCGCGACGTGACCCGTCCACTACCGCCGAGATGTCGCCGA 240
Db 181 AGCGGGCCGGGCTGAGGTTCGCGACGTGACCCGTCCACTACCGCCGAGATGTCGCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGATGCGCGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACCGGCGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACCGGCGTCAACG 360
Qy 361 ACGAGATCCACTACCTGACCGCCGAGGAGGACCGCCACGTGTTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCCGAGGAGGACCGCCACGTGTTGGCGAGGCCAACT 420
Qy 421 CGCCGATCGACACAAGGCGCGGTTTCGGGAGGCGCGGTGCTGTCCGCGCGCAAGGCGG 480
Db 421 CGCCGATCGACACAAGGCGCGGTTTCGGGAGGCGCGGTGCTGTCCGCGCGCAAGGCGG 480
Qy 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGGCCAGA 540
Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGACCGTGCCTCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGACCGTGCCTCC 600
Qy 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGTCGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGTCGCGAGGCGCGCTGG 660
Qy 661 TGGGACCGGCTATGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGCTATGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

## RESULT 4

```
US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7
```

```
Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
```

```
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CCCAGGACGTGAGGCGATCAACCCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGAGGCGATCAACCCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACCCAGCCAGCTGTCCAGTTTCATGACAGACCAACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCCAGCCAGCTGTCCAGTTTCATGACAGACCAACCCGC 120
Qy 121 TGTCCGGGCTACCCACAAGCCCGCTGTTCGGCCCTGGCCCGGGTGGTCTGTCCCGG 180
Db 121 TGTCCGGGCTACCCACAAGCCCGCTGTTCGGCCCTGGCCCGGGTGGTCTGTCCCGG 180
Qy 181 AGCGGGCCGGGCTGAGGTTCGCGACGTGACCCGTCCACTACCGCCGAGATGTCGCCGA 240
Db 181 AGCGGGCCGGGCTGAGGTTCGCGACGTGACCCGTCCACTACCGCCGAGATGTCGCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGATGCGCGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACCGGCGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACCGGCGTCAACG 360
Qy 361 ACGAGATCCACTACCTGACCGCCGAGGAGGACCGCCACGTGTTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCCGAGGAGGACCGCCACGTGTTGGCGAGGCCAACT 420
Qy 421 CGCCGATCGACACAAGGCGCGGTTTCGGGAGGCGCGGTGCTGTCCGCGCGCAAGGCGG 480
Db 421 CGCCGATCGACACAAGGCGCGGTTTCGGGAGGCGCGGTGCTGTCCGCGCGCAAGGCGG 480
Qy 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGGCCAGA 540
Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGACCGTGCCTCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGACCGTGCCTCC 600
Qy 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGTCGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGTCGCGAGGCGCGCTGG 660
Qy 661 TGGGACCGGCTATGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGCTATGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

## RESULT 5

```
US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8
```

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCGG 60  
Db 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCGG 60

Qy 61 CGATCAAGAGATTCTTCCGACACAGCAGCTGTCCAGTTCATGACACAGAACACCCGC 120  
Db 61 CGATCAAGAGATTCTTCCGACACAGCAGCTGTCCAGTTCATGACACAGAACACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCCGCTGTGCGGCTGGGCGCGGTGGTCTGTCCCGGG 180  
Db 121 TGTCCGGGCTCACCCACAAGCCCGCTGTGCGGCTGGGCGCGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCAACCGTCCACTACGCGCGGATGTGCCGA 240  
Db 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCAACCGTCCACTACGCGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGGG 300  
Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGGG 300

Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGTGTACCG 360  
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCGCGAGAGGAGCCGCGACGCTGGTGGCGAGGCCAACT 420  
Db 361 ACGAGATCCACTACTGACCGCGAGAGGAGCCGCGACGCTGGTGGCGAGGCCAACT 420

Qy 421 CGCGCATCGACGACAAAGGCGGTTTCGCGAGGCGCGGTCGTCGCGCGCAAGCGG 480  
Db 421 CGCGCATCGACGACAAAGGCGGTTTCGCGAGGCGCGGTCGTCGCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTCGCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCAGA 540  
Db 481 GCGAGGTCGAGTACGTCGCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCAGA 540

Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGGCC 600  
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGGCC 600

Qy 601 TGATGGGCGCCAAATGACGCGCGGTTTCGCTGTCGCGAGGCGCGCTGG 660  
Db 601 TGATGGGCGCCAAATGACGCGCGGTTTCGCTGTCGCGAGGCGCGCTGG 660

Qy 661 TGGGACCGGATGGAGTTCGCGCGCGCGATCGACGCGGCGACGT 705  
Db 661 TGGGACCGGATGGAGTTCGCGCGCGCGATCGACGCGGCGACGT 705

## RESULT 6

US-09-285-306-9

; Sequence 9, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 9

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 8.2e-156;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCGG 60  
Db 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCGG 60

Qy 61 CGATCAAGAGATTCTTCCGACACAGCAGCTGTCCAGTTCATGAGACAGAACACCCGC 120  
Db 61 CGATCAAGAGATTCTTCCGACACAGCAGCTGTCCAGTTCATGAGACAGAACACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCCGCTGTGCGGCTGGGCGCGGTGGTCTGTCCCGGG 180  
Db 121 TGTCCGGGCTCACCCACAAGCCCGCTGTGCGGCTGGGCGCGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCAACCGTCCACTACGCGCGGATGTGCCGA 240  
Db 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCAACCGTCCACTACGCGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGGG 300  
Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGGG 300

Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGTGTACCG 360  
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCGCGAGAGGAGCCGCGACGCTGGTGGCGAGGCCAACT 420  
Db 361 ACGAGATCCACTACTGACCGCGAGAGGAGCCGCGACGCTGGTGGCGAGGCCAACT 420

Qy 421 CGCGCATCGACGACAAAGGCGGTTTCGCGAGGCGCGGTCGTCGCGCGCAAGCGG 480  
Db 421 CGCGCATCGACGACAAAGGCGGTTTCGCGAGGCGCGGTCGTCGCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTCGCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCAGA 540  
Db 481 GCGAGGTCGAGTACGTCGCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCAGA 540

Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGGCC 600  
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGGCC 600

Qy 601 TGATGGGCGCCAAATGACGCGCGGTTTCGCTGTCGCGAGGCGCGCTGG 660  
Db 601 TGATGGGCGCCAAATGACGCGCGGTTTCGCTGTCGCGAGGCGCGCTGG 660

Qy 661 TGGGACCGGATGGAGTTCGCGCGCGCGATCGACGCGGCGACGT 705  
Db 661 TGGGACCGGATGGAGTTCGCGCGCGCGATCGACGCGGCGACGT 705

## RESULT 7

US-09-285-306-12

; Sequence 12, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 12

; LENGTH: 705

```
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
DB 1 CCCAGACGTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
QY 61 CGATCAAGGAGTCTTTCGGCACACGACGCTGTCCAGTTCATGACACGACAAACCCGC 120
DB 61 CGATCAAGGAGTCTTTCGGCACACGACGCTGTCCAGTTCATGACACGACAAACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTCCGGCGTGGGCGCGGTGTCTGTCCCGGG 180
DB 121 TGTGGGGCTCACCCACAAGCGCGCTGTCCGGCGTGGGCGCGGTGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGCTGAGGTCGCGGAGTGCACCGTCCCACTACGGCCGGATGTGCCGA 240
DB 181 AGCGGGCCGGCTGAGGTCGCGGAGTGCACCGTCCCACTACGGCCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTCCTCAACATCGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
DB 241 TCGAGACCCCGAGGTCCTCAACATCGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGAAGTGTGTGACGCGTGTCAACG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGAAGTGTGTGACGCGTGTCAACG 360
QY 361 ACGAGATCCACTCTGACCCGCGAGAGGACCGCCACTGTGTGGCGCAGGCCAACT 420
DB 361 ACGAGATCCACTCTGACCCGCGAGAGGACCGCCACTGTGTGGCGCAGGCCAACT 420
QY 421 CGCCGATCGACACAAAGGCGGTTTCGGAGGCGCGGTGTGTCGCGCCGCAAGGCGG 480
DB 421 CGCCGATCGACACAAAGGCGGTTTCGGAGGCGCGGTGTGTCGCGCCGCAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTGCGCGCCGAGA 540
DB 481 GCGAGGTCGAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTGCGCGCCGAGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGCCC 600
DB 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGCCC 600
QY 601 TGATGGGCGCCAAATGACGCGCCAGCGGTTCGCGTGTGCGAGCGAGGCGCGCTGG 660
DB 601 TGATGGGCGCCAAATGACGCGCCAGCGGTTCGCGTGTGCGAGCGAGGCGCGCTGG 660
QY 661 TGGGCACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
DB 661 TGGGCACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
```

## RESULT 8

```
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

## RESULT 9

```
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

```
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
DB 1 CCCAGACGTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
QY 61 CGATCAAGGAGTCTTTCGGCACACGACGCTGTCCAGTTCATGACACGACAAACCCGC 120
DB 61 CGATCAAGGAGTCTTTCGGCACACGACGCTGTCCAGTTCATGACACGACAAACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTCCGGCGTGGGCGCGGTGTCTGTCCCGGG 180
DB 121 TGTGGGGCTCACCCACAAGCGCGCTGTCCGGCGTGGGCGCGGTGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGCTGAGGTCGCGGAGTGCACCGTCCCACTACGGCCGGATGTGCCGA 240
DB 181 AGCGGGCCGGCTGAGGTCGCGGAGTGCACCGTCCCACTACGGCCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTCCTCAACATCGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
DB 241 TCGAGACCCCGAGGTCCTCAACATCGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGAAGTGTGTGACGCGTGTCAACG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGAAGTGTGTGACGCGTGTCAACG 360
QY 361 ACGAGATCCACTCTGACCCGCGAGAGGACCGCCACTGTGTGGCGCAGGCCAACT 420
DB 361 ACGAGATCCACTCTGACCCGCGAGAGGACCGCCACTGTGTGGCGCAGGCCAACT 420
QY 421 CGCCGATCGACACAAAGGCGCGGTTTCGGAGGCGCGGTGTGTCGCGCCGCAAGGCGG 480
DB 421 CGCCGATCGACACAAAGGCGCGGTTTCGGAGGCGCGGTGTGTCGCGCCGCAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTGCGCGCCGAGA 540
DB 481 GCGAGGTCGAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTGCGCGCCGAGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGCCC 600
DB 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGCCC 600
QY 601 TGATGGGCGCCAAATGACGCGCCAGCGGTTCGCGTGTGCGAGCGAGGCGCGCTGG 660
DB 601 TGATGGGCGCCAAATGACGCGCCAGCGGTTCGCGTGTGCGAGCGAGGCGCGCTGG 660
QY 661 TGGGCACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
DB 661 TGGGCACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
```

```
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120

QY 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180

QY 181 AGCGGGCCGGGCTGGAGTCCCGCAGCTGCACCCCTGCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGGCTGGAGTCCCGCAGCTGCACCCCTGCCACTACGCGCGGATGTGCCGA 240

QY 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGGG 300
Db 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCAGCGCGTGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCAGCGCGTGTGTCACCG 360

QY 361 ACGAGATCCACTACCTACCGCGCAGAGGAGCCGCACTGAGTGGTGGCGGCGGCAACT 420
Db 361 ACGAGATCCACTACCTACCGCGCAGAGGAGCCGCACTGAGTGGTGGCGGCGGCAACT 420

QY 421 CGCGATCGAGACAAAGGGCGGTTCCGGAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCGG 480
Db 421 CGCGATCGAGACAAAGGGCGGTTCCGGAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCGG 480

QY 481 GCGAGGTCGAGTACGTCCCTCGTCCGAGGTCGACTACATGGAAGTTCGCGCGGCGGCGA 540
Db 481 GCGAGGTCGAGTACGTCCCTCGTCCGAGGTCGACTACATGGAAGTTCGCGCGGCGGCGA 540

QY 541 TGGTGTCCGGTGGCCACCGCGATGATCCCGTTCTCCGAGCAGCAGCGCCAAACCGTGCCC 600
Db 541 TGGTGTCCGGTGGCCACCGCGATGATCCCGTTCTCCGAGCAGCAGCGCCAAACCGTGCCC 600

QY 601 TGATGGCGCCAAACATCAGCGCCAGCGGTTCCGTTGGTGGCAGAGGCGCGCTGG 660
Db 601 TGATGGCGCCAAACATCAGCGCCAGCGGTTCCGTTGGTGGCAGAGGCGCGCTGG 660

QY 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACCGGCGACGT 705
Db 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACCGGCGACGT 705
```

## RESULT 10

```
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; EARLIER FILING DATE: 1999-04-02
```

```
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16
```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGGAACAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGGAACAGAACACCCGC 120

QY 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180

QY 181 AGCGGGCCGGGCTGGAGTCCCGCAGCTGCACCCCTGCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGGCTGGAGTCCCGCAGCTGCACCCCTGCCACTACGCGCGGATGTGCCGA 240

QY 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGGG 300
Db 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCAGCGCGTGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCAGCGCGTGTGTCACCG 360

QY 361 ACGAGATCCACTACCTACCGCGCAGAGGAGCCGCACTGAGTGGTGGCGGCGGCAACT 420
Db 361 ACGAGATCCACTACCTACCGCGCAGAGGAGCCGCACTGAGTGGTGGCGGCGGCAACT 420

QY 421 CGCGATCGAGACAAAGGGCGGTTCCGGAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCGG 480
Db 421 CGCGATCGAGACAAAGGGCGGTTCCGGAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCGG 480

QY 481 GCGAGGTCGAGTACGTCCCTCGTCCGAGGTCGACTACATGGAAGTTCGCGCGGCGGCGA 540
Db 481 GCGAGGTCGAGTACGTCCCTCGTCCGAGGTCGACTACATGGAAGTTCGCGCGGCGGCGA 540

QY 541 TGGTGTCCGGTGGCCACCGCGATGATCCCGTTCTCCGAGCAGCAGCGCCAAACCGTGCCC 600
Db 541 TGGTGTCCGGTGGCCACCGCGATGATCCCGTTCTCCGAGCAGCAGCGCCAAACCGTGCCC 600

QY 601 TGATGGCGCCAAACATCAGCGCCAGCGGTTCCGTTGGTGGCAGAGGCGCGCTGG 660
Db 601 TGATGGCGCCAAACATCAGCGCCAGCGGTTCCGTTGGTGGCAGAGGCGCGCTGG 660

QY 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACCGGCGACGT 705
Db 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACCGGCGACGT 705
```

## RESULT 11

```
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
```



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; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCAGTCCAGTCTGGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCAGTCTGGGCGG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACGACGAGCTGTCCAGTTTCATGACCAAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACGACGAGCTGTCCAGTTTCATGACCAAGAACACCCGC 120
Qy 121 TGTGGGGCTCACCCACAGCGCCGCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAGCGCCGCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGGAGGTCCCGAGCTGCACCGCTCCCACTACCGCGCGGATGTCCCGGA 240
Db 181 AGCGGGCGGGCTGGAGGTCCCGAGCTGCACCGCTCCCACTACCGCGCGGATGTCCCGGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGATCGGTCTGATCGGTCTGATCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGATCGGTCTGATCGGG 300
Qy 301 TCAACCCGTTCGGGTTCATCGAGACGCGTACCGCAAGGTGTCAACGCGGTGTCAACCG 360
Db 301 TCAACCCGTTCGGGTTCATCGAGACGCGTACCGCAAGGTGTCAACGCGGTGTCAACCG 360
Qy 361 ACGAGATCCACTTACCTGACCGCGGAGGAGGACCGCAAGTGTGGCGAGGCGCAACT 420
Db 361 ACGAGATCCACTTACCTGACCGCGGAGGAGGACCGCAAGTGTGGCGAGGCGCAACT 420
Qy 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTTCGGTTCGCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTTCGGTTCGCGCGCAAGGCGG 480
Qy 481 GCGAGTTCGAGTACGTGCGCTTCGAGGTTGACTACATGACGAGTGTGTGTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCGCTTCGAGGTTGACTACATGACGAGTGTGTGTCGCGCGCCAGA 540
Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCAGCAGCAGTGC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCAGCAGCAGTGC 600
Qy 601 TGATGGGCGCCAAATGACAGCGCCAGGCGGTTTCGCTGTGTCGACGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACAGCGCCAGGCGGTTTCGCTGTGTCGACGAGGCGCGCTGG 660
Qy 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
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## RESULT 12

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US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
```

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; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17
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Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 1.9e-155;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCAGTCCAGTCTGGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCAGTCTGGGCGG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACGACGAGCTGTCCAGTTTCATGACCAAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACGACGAGCTGTCCAGTTTCATGACCAAGAACACCCGC 120
Qy 121 TGTGGGGCTCACCCACAGCGCCGCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAGCGCCGCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGGAGGTCCCGAGCTGCACCGCTCCCACTACCGCGCGGATGTCCCGGA 240
Db 181 AGCGGGCGGGCTGGAGGTCCCGAGCTGCACCGCTCCCACTACCGCGCGGATGTCCCGGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGATCGGTCTGATCGGTCTGATCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGATCGGTCTGATCGGG 300
Qy 301 TCAACCCGTTCGGGTTCATCGAGACGCGTACCGCAAGGTGTCAACGCGGTGTCAACCG 360
Db 301 TCAACCCGTTCGGGTTCATCGAGACGCGTACCGCAAGGTGTCAACGCGGTGTCAACCG 360
Qy 361 ACGAGATCCACTTACCTGACCGCGGAGGAGGACCGCAAGTGTGGCGAGGCGCAACT 420
Db 361 ACGAGATCCACTTACCTGACCGCGGAGGAGGACCGCAAGTGTGGCGAGGCGCAACT 420
Qy 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTTCGGTTCGCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTTCGGTTCGCGCGCAAGGCGG 480
Qy 481 GCGAGTTCGAGTACGTGCGCTTCGAGGTTGACTACATGACGAGTGTGTGTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCGCTTCGAGGTTGACTACATGACGAGTGTGTGTCGCGCGCCAGA 540
Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCAGCAGTGC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCAGCAGTGC 600
Qy 601 TGATGGGCGCCAAATGACAGCGCCAGGCGGTTTCGCTGTGTCGACGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACAGCGCCAGGCGGTTTCGCTGTGTCGACGAGGCGCGCTGG 660
Qy 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
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## RESULT 13

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US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
```

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; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGAGTGGAGCGATCAACCGCAGACCCCTGATCAACATCGCTCCAGTCGTGGCGG 60
Db 1 CCCAGGAGTGGAGCGATCAACCGCAGACCCCTGATCAACATCGCTCCAGTCGTGGCGG 60

Qy 61 CGATCAAGGAGTCTTCCGGCACCCAGCAGCTGTCCAGTTCATGACCAAGCAACACCGC 120
Db 61 CGATCAAGGAGTCTTCCGGCACCCAGCAGCTGTCCAGTTCATGACCAAGCAACACCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCGCCCTGTGTCGGCGCTGGCCCGGGTGGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTGTCGGCGCTGGCCCGGGTGGTCTGTCCCGG 180

Qy 181 AGCGGGCCGGCTGGAGTTCGGAGTCGGACGTCGACCCGTCCTCCATACGGCCGATGTCCCGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGGAGTCGGACGTCGACCCGTCCTCCATACGGCCGATGTCCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300

Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCTTACCGCAAGGTGGTTCGACGGCTGTACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTTACCGCAAGGTGGTTCGACGGCTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCCGACGAGGAGGACCGCACGTGTGGTGGCGGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCCGACGAGGAGGACCGCACGTGTGGTGGCGGAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAGGCGCGGTTTCGGCGAGGCGCCGGTGTGCTGCTCCCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTTCGGCGAGGCGCCGGTGTGCTGCTCCCGCAAGGCGG 480

Qy 481 GCGAGGTTCGAGTACGTGCTCCGTCAGAGTGGACTACATGAGAGTGTGTCGCGCGCCAGA 540
Db 481 GCGAGGTTCGAGTACGTGCTCCGTCAGAGTGGACTACATGAGAGTGTGTCGCGCGCCAGA 540

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCCTCGACGACGACGACCGCAACCGTGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCCTCGACGACGACGACCGCAACCGTGCC 600

Qy 601 TGATGGGCGCCAAATGACGAGCCAGCGGGTTCCGCTGGTCGCGAGCGAGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGAGCCAGCGGGTTCCGCTGGTCGCGAGCGAGCGCGCTGG 660

Qy 661 TGGGACCGGATGAGAGTTCGCGCGCGCGATCGACGCGCGGACGCT 705
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Db 661 TGGGACCGGATGAGAGTTCGCGCGCGCGATCGACGCGGACGCT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 1 CCCAGGAGTGGAGCGATCAACCGCAGACCCCTGATCAACATCGCTCCAGTCGTGGCGG 60
Db 1 CCCAGGAGTGGAGCGATCAACCGCAGACCCCTGATCAACATCGCTCCAGTCGTGGCGG 60

Qy 61 CGATCAAGGAGTCTTCCGGCACCCAGCAGCTGTCCAGTTCATGACCAAGCAACACCGC 120
Db 61 CGATCAAGGAGTCTTCCGGCACCCAGCAGCTGTCCAGTTCATGACCAAGCAACACCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCGCCCTGTGTCGGCGCTGGCCCGGGTGGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTGTCGGCGCTGGCCCGGGTGGTCTGTCCCGG 180

Qy 181 AGCGGGCCGGCTGGAGTTCGGAGTCGGACGTCGACCCGTCCTCCATACGGCCGATGTCCCGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGGAGTCGGACGTCGACCCGTCCTCCATACGGCCGATGTCCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300

Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCTTACCGCAAGGTGGTTCGACGGCTGTACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTTACCGCAAGGTGGTTCGACGGCTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCCGACGAGGAGGACCGCACGTGTGGTGGCGGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCCGACGAGGAGGACCGCACGTGTGGTGGCGGAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAGGCGCGGTTTCGGCGAGGCGCCGGTGTGCTGCTCCCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTTCGGCGAGGCGCCGGTGTGCTGCTCCCGCAAGGCGG 480

Qy 481 GCGAGGTTCGAGTACGTGCTCCGTCAGAGTGGACTACATGAGAGTGTGTCGCGCGCCAGA 540
Db 481 GCGAGGTTCGAGTACGTGCTCCGTCAGAGTGGACTACATGAGAGTGTGTCGCGCGCCAGA 540

Qy 661 TGGGACCGGATGAGAGTTCGCGCGCGCGATCGACGCGCGGACGCT 705
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QY 541 TGGTGTGGTGGCCACCGGATGATCCCGTTCTTCGAGACGACGACGACCGCAACCGTGGCC 600
Db |||||
QY 541 TGGTGTGGTGGCCACCGGATGATCCCGTTCTTCGAGACGACGACGACGCAACCGTGGCC 600
Db |||||
QY 601 TGATGGGCGCCCAACATGACGCGCCACGCGGTTCCGCTGGTGGCGACGAGGCGCGCTGG 660
Db |||||
QY 601 TGATGGGCGCCCAACATGACGCGCCACGCGGTTCCGCTGGTGGCGACGAGGCGCGCTGG 660
QY 661 TGGGACCGGCGATGAGCTGCGCGGCGGCGATCGACGCGGCGACGT 705
Db |||||
QY 661 TGGGACCGGCGATGAGCTGCGCGGCGGCGATGAGCTGCGGCGGCGACGT 705
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## RESULT 15

US-09-285-306-10  
; Sequence 10, Application US/09285306A  
; Publication NO. US20020187467A1  
; GENERAL INFORMATION:

; APPLICANT: Drenkow, Thomas  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 10  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;  
Best Local Similarity 98.0%; Pred. No. 1.6e-152;  
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

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QY 1 CCCAGGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCAGTCCAGTCTGGCGG 60
Db |||||
QY 61 CGATCAAGAGTTCTTGGGCAACAGCGAGTGTCCAGTTCATGACGAGAACAAACCGC 120
Db |||||
QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGGCTGTGTCTCCCGG 180
Db |||||
QY 181 AGCGGGCGGGCTGGAGGTCCGCGAGCTGCACCCGCTCCACTACCGCGCGGATGTGCCGA 240
Db |||||
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGTATGCGCGG 300
Db |||||
QY 301 TCAACCCGTTGGGTTTCATCGAGAGCGCTACCGCAAGTGGTGCACGCGTGTGTCACCG 360
Db |||||
QY 361 ACGAGATCCACTACCTGACCGCGGAGGAGGACCGCAACGTSCTGGCGGCGCAACT 420
Db |||||
QY 421 CGCCGATCGACGACAAAGGCGCGGTTGCGGAGCGCGGTTGCTGTCCCGCGCAAGCGG 480
Db |||||
QY 481 GCGAGGTGAGTACGTGCGCCTCGTCGAGGTGGAATAATGACGTTGCGCGCGGCCAGA 540
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Db |||||
QY 481 GCGAGGTGAGTACGTGCGCCTCGTCGAGGTGGAATAATGACGTTGCGCGCGGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACGCAACCGTGGCC 600
Db |||||
QY 601 TGATGGGCGCCCAACATGACGCGCCACGCGGTTCCGCTGGTGGCGACGAGGCGCGCTGG 660
Db |||||
QY 661 TGGGACCGGCGATGAGCTGCGCGGCGGCGATCGACGCGGCGACGT 705
Db |||||
QY 661 TGGGACCGGCGATGAGCTGCGCGGCGGCGATCGACGCGGCGACGT 705
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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds  
(without alignments)  
11150.034 Million cell updates/sec

Title: US-09-285-306-7  
Perfect score: 705  
Sequence: 1 cccaggacgtgagcgatc.....ggcgatcgagcgagcgt 705

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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2: /cgn2\_6/ptodata/1/ina/5B\_COMB.seq: \*  
3: /cgn2\_6/ptodata/1/ina/6A\_COMB.seq: \*  
4: /cgn2\_6/ptodata/1/ina/6B\_COMB.seq: \*  
5: /cgn2\_6/ptodata/1/ina/PCTUS\_COMB.seq: \*  
6: /cgn2\_6/ptodata/1/ina/backfiles1.seq: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	2	US-08-313-185-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
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22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	5099	4	US-09-887-052-1

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appli
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appli
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
c 31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, App
c 32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
c 35	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
37	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
41	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
42	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
44	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
c 45	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App

## ALIGNMENTS

RESULT 1

US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08797,812  
; FILING DATE: 07-FEB-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/017,765  
; FILING DATE: 15-MAY-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/629,031  
; FILING DATE: 08-APR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/012,631  
; FILING DATE: 01-MAR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/011,339  
; FILING DATE: 08-FEB-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fitts, Renee A.  
; REGISTRATION NUMBER: 35,136  
; REFERENCE/DOCKET NUMBER: 16528X-018550  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-326-2400  
; TELEFAX: 415-326-2422



```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACGACGACCGCTGATCAACATCCGTCACGTCGTGGCGG 60
DB 761003 CCCAGGACGTGGAGGCGATCACACGACGACCGCTGATCAACATCCGTCGTGGCGG 761062

QY 61 CGATCAAGAGTCTTTCGACACGACGACGTCGTCAGTTCATGACGACGACGACGACG 120
DB 761063 CGATCAAGAGTCTTTCGACACGACGACGTCGTCAGTTCATGACGACGACGACG 761122

QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGCTGTCGTGTCGCGGG 180
DB 761123 TGTGGGGCTGACCCACAGCGCGCTGTGCGCGCTGGCGCGCTGTCGTGTCGCGGG 761182

QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTCGACCGCTCCACCTACGCGCGGATGTCGCG 240
DB 761183 AGCGGCGCGGCTGGAGGTCGCGACGTCGACCGCTCCACCTACGCGCGGATGTCG 761242

QY 241 TCGAGACCGCGAGGTCGACATCGTCTGATCGGTCGTCGTCGTCGTCGTCGTCG 300
DB 761243 TCGAAACCGCTGAGGGGCGCAACATCGTCTGATCGGTCGTCGTCGTCGTCG 761302

QY 301 TCAACCGTTCGGTTTCATCGAGAGCGCTGACGCAAGGTGTCGACGCGGTCACCG 360
DB 761303 TCAACCGTTCGGTTTCATCGAAACGCGCTGACGCAAGGTGTCGACGCGGTCG 761362

QY 361 ACAGATCCACTACCTGACCGCGACGAGGAGGACCGCACTGTGTGGCGGAGGCAACT 420
DB 761363 ACAGATCCGTCGTCGTCGACCGCGACGAGGAGGACCGCACTGTGTGGCGGAGG 761422

QY 421 CGCGGATCGACGACGAGGCGCGGTCGCGAGGCGCGGTCGTCGTCGTCGTCGTCG 480
DB 761423 CGCGGATCGATCGGACGCGTCGCTTCGTCGAGCGCGGTCGTCGTCGTCGTCG 761482

QY 481 GCGAGTTCAGTACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540
DB 761483 GCGAGTTCAGTACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 761542

QY 541 TGTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 600
DB 761543 TGTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 761602

QY 601 TGAATGGCGCCAAATGACGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
DB 761603 TCAATGGGCGCAAAATGACGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCG 761662

QY 661 TGGGCAACCGGATGAGGTCGCGCGCGGCGATGACGCGG 699
DB 761663 TGGGCAACCGGATGAGGTCGCGCGCGGCGATGACGCGG 761701
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RESULT 4

US-08-313-185-57

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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Teienti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313.185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57
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Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 511; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACGCGACGACCCCTGATCAACATCCGTCACGTCGTGGCGG 60
DB 1124 CCCAGGACGTGGAGGCGATCACACGCGACGACGCTGATCAATATCCGTCGCGTGGTCGCGG 1183

QY 61 CGATCAAGAGTCTTTCGCGACGACGCGGCTGTCGCGGCTCGGCGCTGTCGTCGTCGTCGTCG 120
DB 1184 CTATCAAGAAATCTTTCGCGACGACGCGGCTGTCGAGTTCATGATCAGAACCAACCCCTC 1243

QY 121 TGTGGGCGCTCACCCACAGCGCGCTGTCGCGGCTCGGCGCTCGGCGCTGTCGTCGTCGTCG 180
DB 1244 TGTGGGCGCTGACCCACAGCGCGGCTGTCGCGGCTCGGCGCTGTCGTCGTCGTCGTCG 1303

QY 181 AGCGGCGCGGCTGGAGTTCGCGACGTCGACCGCTCCACCTGACGCGCGGATGTCGCGCG 240
DB 1304 AGCGTGGCGGCTAGAGTTCGTCGACGTGCACTTCGCACTACGCGCGGATGTCGCGCG 1363

QY 241 TCGAGACCGCGGAGGTCGCGACATCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 300
DB 1364 TCGAGACTCCGCGAGGCGCGGACATAGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1423

QY 301 TCAACCGTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGTCGACGCGGTCGTCACCG 360
DB 1424 TCAACCGTTCGGGTTTCATCGAAACACCGCTACCGCAAGGTGTCGACGCGGTCGTCACCG 1483
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Qy	361	ACGAGATCCACTACCTGACCGCCGACGAGAGGACCGCCACGTGGTGGCGCAGGCCAACT	420
Db	1484	ACGAGATCGAATACCTTGACCGCTGACGAGGAAGACCGCCATGTCGTGGCGCAGGCCAACT	1543
Qy	421	CGCGATCGACGACAAAGGCGCGTTCCGCGAGGCCCGGGTGCTGGTCCGCGCGCAAGCGCG	480
Db	1544	CGCGATCGACGAGGCCGCGTCTCTCGAGCCGCGCGTGTGGTTCGCGCGCGCAAGCGCG	1603
Qy	481	GCAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACGTGTCCGCCGCGCAGA	540
Db	1604	GCAGGTGGAGTACGTGGCCCTCGTCCGAGTGGATTACATGGATGTCTGCCACGCCAGA	1663
Qy	541	TGCGTTCGCTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGCCC	600
Db	1664	TGCGTTCGCTGGCCACACCGATGATTCGTTCTTGAGCAGCAGCAGCCAAACCGTGCCC	1723
Qy	601	TGATGGCGGCCAACATGCAGCGCCAGCGCGTTCCGCTTGGTCGCGAGCGAGCGCGCGCTGG	660
Db	1724	TGATGGCGCTAACATGCAGCGCCAGCGGTTCCGTTGGTTCGCGAGCAGCAGCGCTGG	1783
Qy	661	TGGGCACCGGCATGGAGCTCGCGCGCGCATCGACGCGG	699
Db	1784	TGGGTCACCGGTATGGAGTTTCGGCGCGCCATTCACGCGTG	1822

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RESULT 6  
US-08-250-030-1  
; Sequence 1, Application US/08250030  
; Patent No. 5643723  
; GENERAL INFORMATION:  
; APPLICANT: Persing, David H.  
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in  
; TITLE OF INVENTION: Clinical Specimens  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Schwegman, Lundberg & Woessner  
; STREET: 3500 IDS Center  
; CITY: Minneapolis  
; STATE: MN  
; COUNTRY: USA



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; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGAGGCGATCACACGACAGCCCTGATCAACATCCGTCAGTCGTCGCGG 60
Db 341 CCCAGGACGTGAGGCGATCACACGACAGCCCTGATCAACATCCGTCAGTCGTCGCGG 400

QY 61 CGATCAAGGAGTTCTTCGGCACCGACGCTGTCCAGTTTCATGACACAGAACACCCGCG 120
Db 401 CGATCAAGGAGTTCTTCGGCACCGACGCTGTCCAGTTTCATGACACAGAACACCCGCG 460

QY 121 TGTGGGGTTCACCAAGCGCGCTGTGGCGCTGGGCGGCTGTGTCTGTCCGCG 180
Db 461 TGTGGGGTTCACCAAGCGCGCTGTGGCGCTGGGCGGCTGTGTCTGTCCGCG 520

QY 181 AGCGGGCGGCTGGAGTTCGCGACGTCGACCGCTCCACTACGCGCGGATGTCGCGA 240
Db 521 AGCGTGC CGGCTGGAGGAGCGGACGTCGACCGCTCCACTACGCGCGGATGTCGCGA 580

QY 241 TCGAGACCCCGGAGGTCCTCAACATCGGCTCGCTGTGGTGTATGCGCGG 300
Db 581 TCGAACCCTGAGGGCCCAACATCGTCTGATCGGCTCGCTGTGGTGTATGCGCGG 640

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGAAGTGTGTGACGCGTGTACCG 360
Db 641 TCAACCCGTTCCGGTTTCATCGAAGCGCGTACCGAAGTGTGTGACGCGTGTACCG 700

QY 361 ACGAGTTCACCTACCTGACCGCGAGGAGGACCGCCACGTCGTGTGGCGAGGCAACT 420
Db 701 ACGAGTTCGTGTACCTGACCGCGAGGAGGACCGCCACGTCGTGTGGCGAGGCAACT 760

QY 421 CGCCGATCGACGACGAGGCGCGTTCGCGAGGCGCGGCTGTGTGTGTCGCGCGCAAGCGG 480
Db 761 CGCCGATCGATCGGAGCGTGTGCTGTGTCGACCGCGGCTGTGTGTGTCGCGCGCAAGCGG 820

QY 481 GCGAGTCGAGTACGTGCGCTCGTCGAGGTGGAATACATGACGCTGTGCGCGCGCGA 540
Db 821 GCGAGTCGAGTACGTGCGCTCGTCGAGGTGGAATACATGACGCTGTGCGCGCGCGA 880

QY 541 TGGTGTGCGTGGCCACCGGATGATCCGTTCTCGAGCACGACGACGCGCAACCGTGGCC 600
Db 881 TGGTGTGCGTGGCCACCGGATGATCCGTTCTCGAGCACGACGACGCGCAACCGTGGCC 940

QY 601 TGATGGGCGCAACATGACGAGCGCCAGGCGG 630
Db 941 TCATGGGCGCAACATGACGAGCGCCAGGCGG 970
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RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1
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Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGAGGCGATCACACGACAGCCCTGATCAACATCCGTCAGTCGTCGCGG 60
Db 341 CCCAGGACGTGAGGCGATCACACGACAGCCCTGATCAACATCCGTCAGTCGTCGCGG 400

QY 61 CGATCAAGGAGTTCTTCGGCACCGACGCTGTCCAGTTTCATGACACAGAACACCCGCG 120
Db 401 CGATCAAGGAGTTCTTCGGCACCGACGCTGTCCAGTTTCATGACACAGAACACCCGCG 460

QY 121 TGTGGGGTTCACCAAGCGCGCTGTGGCGCTGGGCGGCTGTGTCTGTCCGCG 180
Db 461 TGTGGGGTTCACCAAGCGCGCTGTGGCGCTGGGCGGCTGTGTCTGTCCGCG 520

QY 181 AGCGGGCGGCTGGAGTTCGCGACGTCGACCGCTCCACTACGCGCGGATGTCGCGA 240
Db 521 AGCGTGC CGGCTGGAGGAGCGGACGTCGACCGCTCCACTACGCGCGGATGTCGCGA 580

QY 241 TCGAGACCCCGGAGGTCCTCAACATCGGCTCGCTGTGGTGTATGCGCGG 300
Db 581 TCGAACCCTGAGGGCCCAACATCGTCTGATCGGCTCGCTGTGGTGTATGCGCGG 640

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGAAGTGTGTGACGCGTGTACCG 360
Db 641 TCAACCCGTTCCGGTTTCATCGAAGCGCGTACCGAAGTGTGTGACGCGTGTACCG 700

QY 361 ACGAGTTCACCTACCTGACCGCGAGGAGGACCGCCACGTCGTGTGGCGAGGCAACT 420
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Db 701 ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCACGTTGGTCACACGAGGCCAATT 760  
QY 421 CCGCATCGACGACAAAGGCGCGGTTTCGCGAGGCGCGGTTGCTGTCGCGCGCAGAGCGG 480  
Db 761 CCGCATCGATCGGACGCGTGCCTTCGTCGAGCCGCGGTTGCTGTCGCGCGCAGAGCGG 820  
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Db 821 GCGAGGTGAGTACGTCGCTCGTCCGAGGTGACCTACATGAGACGTTGTCGCGCGCCAGA 880  
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGCGCAACGTTGCC 600  
Db 881 TGGTGTGCGTGGCCACCGCGATGATTCCTTCGAGACGACGACGCCAACGTTGCC 940  
QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGG 630  
Db 941 TCATGGGGCAACATGACGCCAGGCGG 970

## RESULT 8

US-08-757-653-135  
; Sequence 135, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;  
Best Local Similarity 91.0%; Pred. No. 5.8e-102;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
QY 36 ATCAACATCCGTCAGTCGTCGCGCGATCAAGAGGATTTCTTCGGCACCGACGAGCTGTCC 95  
Db 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGGATTTCTTCGGCACCGACGAGCTGAGC 60  
QY 96 CAGTTCATGGACAGAACACCGCTGTGGGGCTCACCCACAGCGCGGCTGTGGCG 155  
Db 61 CAATTCATGGACAGAACACCGCTGTGGGGTTTGACCCCAAGCGCGACTGTGGCG 120

QY 156 CTGGGCGCGGTGCTCTGTCTCCGGGAGCGGCGCCGGGCTCGAGGTCCTCGCGACGTGCACCCG 215  
Db 121 CTGGGCGCGGTGCTCTGTCTCGGTGAGGTCGCGGGCTCGAGGTCCTCGCGACGTGCACCCG 180  
QY 216 TCCCATACGCGCGGATGTGCCCATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGCGCGGATGTGCCCATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
QY 276 GGCTCGCTGTCGTTGATGCGCGGTCAACCCGTTTCGGTTTCATCGAGAGCCGCTACCGC 335  
Db 241 GGCTCGCTGTCGTTGATGCGCGGTCAACCCGTTTCGGTTTCATCGAAACCGCTACCGC 300  
QY 336 AAGTGTGTTCACGCGGTGTCACCGAGATCACTACCTGACCGCGCGAGAGGAC 395  
Db 301 AAGTGTGTTCACGCGGTGTCACCGAGATCGTTACCTGACCGCGCGAGAGGAC 360  
QY 396 CGCACGCTGTGGCGCAGGCGCACTCGCGCATCGACACAGGGCCGGTTCGCGGAGGCC 455  
Db 361 CGCACGCTGTGGCGCAGGCGCACTTCGCCATCGACGCGGTTCGTCGAGCGC 420  
QY 456 CGGCTGTGTCGCGCGCAAGGCGGCGAGTCCGAGTACGTCGCTCGTCCGAGGTGAC 515  
Db 421 CGGCTGTGTCGCGCGCAAGGCGGCGAGTCCGAGTACGTCGCTCGTCCGAGGTGAC 480  
QY 516 TACATGACGCTGTCCGCGCGCATGCTGTGCTGGTGGCCACCGCGATGATCCCTTCTC 575  
Db 481 TACATGACGCTGTCCGCGCGCATGCTGTGCTGGTGGCCACCGCGATGATCCCTTCTC 540  
QY 576 GAGCAGCAGCAGCCAAACCGTGCCTGATGGGCGCCCAACATGACGCGCGAGGCTTCG 635  
Db 541 GAGCAGCAGCAGCCAAACCGTGCCTCATGGGGGCAAAACATGACGCGCGAGGCTTCG 600  
QY 636 CTGGTGGCGAGCGAGGCGCC 655  
Db 601 CTGGTGGCGAGCGAGGCGCC 620

## RESULT 9

US-08-757-653-138/c  
; Sequence 138, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:



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Db      601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db      620 ATCAACATCCGCGCGTGTCCCGCATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 561

Qy      96 CAGTTCTGAGCAGACAACCCGCTGTCCGGGCTCACCCACAAGCCGCGCTGTCCGCG 155
Db      560 CAATTCATGACCAAGAACCCGCTGTCCGGGTTGACCCACAAGCCGCGCTGTCCGCG 501

Qy      156 CTGGGCCCGGGTGTCTGTCTCCCGAGAGCGGCGCGGCTGGAGTCCGCGAGTGCACCCG 215
Db      500 CTGGGGCCCGCGGCTGTCTGTACGTAGCGTGC CGGGCTGGAGGTCCGCGAGCTGCACCCG 441

Qy      216 TCCTACTAGCGCGGATGTGCCGATCGAGACCCGAGGGTCCCAACATCGTCTGATC 275
Db      440 TCGCACTAGCGCGGATGTGCCGATCGAACCCTTGAGGGGCCCAACATCGTCTGATC 381

Qy      276 GGCTCGCTGTGGTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACCGCGTACC 335
Db      380 GGCTCGCTGTGGTGTATGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAGCGCGTACC 321

Qy      336 AGGTGGTTCGAGCGGTGGTTCACCGACGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
Db      320 AAGGTGGTTCGAGCGGTGGTTCAGCGACGAGATCGTGTACCTGACCGCGCGAGGAGGAC 261

Qy      396 GCCACGTTGTGGCGCAGGCCAACTCGCCGATCGACGACAAGGGCCCGGTTTCGCGAGGCC 455
Db      260 GCCACGTTGTGGCGCAGGCCAACTTCGCCGATCATGGGACGGTTCGTTCTGTCGAGCCG 201

Qy      456 CGGTTGTGTGTCGCGCCGCAAGCGCGGCGAGGTCCAGTACGTGTCCTCGTCCGAGGTGAC 515
Db      200 CGCGTGTGTGTCGCGCCGCAAGCGCGGCGAGGTACGTGTCCTCGTCTGAGGTGAC 141

Qy      516 TACATGGACGTTGTCCGCGCCGACAGATGGTGTCCGTCGCCACCGGATGATCCCGTTCCTC 575
Db      140 TACATGGACGTTGTCCGCGCCGACAGATGGTGTCCGTCGCCACCGGATGATTCCTTCTC 81

Qy      576 GAGCACGACGACGCAACCGTCCCTGATGGCGCCCAACATGTCAGCGCCAGCGCGTTCG 635
Db      80 GAGCACGACGACGCAACCGTCCCTCATGGGGGCAACATGTCAGCGCCAGCGCGTTCG 21

Qy      636 CTGTGCGCAGCAGGCGCC 655
Db      20 CTGTGCGTAGCGAGGCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db      1 ATCAACATCCGCGCGTGTTCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 60
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QY 96 CAGTTTCATGACACAGAACACCGCTGTGCGGGCTCACCCACAAAGCGCCCTGTGCGGG 155  
DB 61 CAATTTCATGACACAGAACACCGCTGTGCGGGTTGACCCACAAAGCGCGACTGTGCGGG 120  
QY 156 CTGGGCCCCGGTCTGTCTCCGGGAGCGGGCGGGCTGAGGTCCGCGACGTGCAACCG 215  
DB 121 CTGGGCCCCGGTCTGTCTGAGCGTGCAGGCTGAGGTCCGCGACGTGCAACCG 180  
QY 216 TCCCACTACGCGCGGATGTCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
DB 181 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
QY 276 GGTCTGCTGCTGCTGATGCGGGGTCAACCGCTTCGGGTTTCATCGAGACGCGTACCGC 335  
DB 241 GGTCTGCTGCTGCTGATGCGGGGTCAACCGCTTCGGGTTTCATCGAAACGCGCTACCGC 300  
QY 336 AAGGTGGTTCAGCGCGGTGTACCGACGAGATCCACTGTACCGCGCGACGAGGAGGAC 395  
DB 301 AAGGTGGTTCAGCGCGGTGTAGCGACGAGATCGTGTACCTGACCCCGACGAGGAGGAC 360  
QY 396 CGCCACGTGGTGGCGAGGCCAACTCGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCC 455  
DB 361 CGCCACGTGGTGGCGAGGCCAACTCGCCGATCGATGCGGACGCTCGTTCGTCGAGCGC 420  
QY 456 CGGGTCTGCTGCTGCGCGGAGGCGGCGAGGTGAGTACGTGCTTCGTCGAGGTGAC 515  
DB 421 CGGTGCTGCTGCTGCGCGGAGGCGGCGAGGTGAGTACGTGCTTCGTCGAGGTGAGC 480  
QY 516 TACATGAGCTGTGCGCGCGCAGATGCTGTGCGTGGCCACCGCATGATCCGTTCTCTC 575  
DB 481 TACATGAGCTGTGCGCGCGCAGATGCTGTGCGTGGCCACCGCATGATCCGTTCTCTC 540  
QY 576 GAGCAGACGACGCCAACCGTGCCTGTATGGGCGCAACATGACAGCGCGAGCGGTTCG 635  
DB 541 GAGCAGACGACGCCAACCGTGCCTCATGGGGCAACATGACAGCGCGAGCGGTTCGCG 600  
QY 636 CTGGTGGCAGGAGCGGCC 655  
DB 601 CTGGTGGTGGAGGCGCCC 620

## RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROM, MARY ANN D.

; OLIVE, DAVID M.

; LYAMICHEV, VICTOR I.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN &amp; CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: &lt;Unknown&gt;

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

## TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

; US-09-655-378A-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
Best Local Similarity 91.0%; Pred. No. 5.8e-102;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCCGTCCAGTGTGCGCGCGATCAAGGAGTTCTTCGGCACACAGCCAGCTGTCC 95  
DB 620 ATCAACATCCCGCGCGTGTGCGCGCGATCAAGGAGTTCTTCGGCACACAGCCAGCTGAGC 561  
QY 96 CAGTTTCATGACACAGAACACCGCTGTGCGGGTTCACCCAAAGCGCGCTGTGCGGG 155  
DB 560 CAATTTATGACACAGAACCAACCGCTGTGCGGGTTGACCCAAAGCGCGCTGTGCGGG 501  
QY 156 CTGGGCCCCGGTGTGTCTGTCGGGAGGCGGGCTGGAGGTCCGCGACGTGACACCG 215  
DB 500 CTGGGCCCCGGTGTGTCTGTCAGTGAGCGTGCCTGGGCTGGAGGTCCGCGACGTGACCG 441  
QY 216 TCCCACTACGCGCGATGTCGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
DB 440 TCGCACTACGCGCGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381  
QY 276 GGTCTGCTGTGCTGTATGCGCGGTCAACCGCTTCGCGTTTCATCGAGACGCCGTACCGC 335  
DB 380 GGTCTGCTGTGCTGTATGCGCGGTCAACCGCTTCGCGTTTCATCGAAACGCCGTACCGC 321  
QY 336 AAGTGTGTGACGCGGTGTACCGACAGATCCATCTACCTGACCGCGACCGCGAGGAGGAC 395  
DB 320 AAGTGTGTGACGCGGTGTAGCGACAGATCGTGTACCTGACCGCGACCGCGAGGAGGAC 261  
QY 396 CGCCACGCTGGTGGCGCAGGCCAACTCGCGCATCGACGACAAAGGCGCGTTCGCGGAGGCC 455  
DB 260 CGCCACGCTGGTGGCGCAGGCCAACTCGCGCATCGATCGAGCGGTCTTCGTCGAGCGC 201  
QY 456 CGGTGTGCTGCTCGCGCGCAAGCGCGGCGAGGTGAGTACGTGCTGCTCGCTCGAGTGGAC 515  
DB 200 CGGTGTGCTGCTCGCGCGCAAGCGCGGCGAGGTGAGTACGTGCTGCTCGAGTGGAC 141  
QY 516 TACATGAGCTGTGCGCGCGCGAGTGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 575  
DB 140 TACATGAGCTGTGCGCGCGCGAGTGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 81  
QY 576 GAGCAGACGACGCCAACCGTGCCTGATGCGCGCAACATGCGCGCAACATGCGCGCGGTTCG 635  
DB 80 GAGCAGACGACGCCAACCGTGCCTCATGGGGCAACATGCGAGCGCGCGGTTCGCG 21  
QY 636 CTGGTGGCAGCGAGCGGCC 655  
DB 20 CTGGTGGTGGAGGCGCCC 1

## RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843659

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

```
/
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Medlen & Carroll, LLP
/ STREET: 220 Montgomery Street, Suite 2200
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: United States Of America
/ ZIP: 94104
/
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ FILING DATE:
/ FILING DATE:
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ingolia, Diane E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: FORS-02565
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 136:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 620 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/
/ US-08-757-653-136
/
/ Query Match 75.0%; Score 528.8; DB 2; Length 620;
/ Best Local Similarity 90.8%; Pred. No. 1.3e-101;
/ Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;
/
/ QY 36 ATCAACATCCGTCAGTCGTGCGCGCATCAAGAGAGTTCTTCGGACCAAGCCAGCTGTCC 95
/ DB 1 ATCAACATCCGCGGTGTGTCGCCGATCAAGAGAGTTCTTCGGACCAAGCCAGCTGTGAGC 60
/
/ QY 96 CAGTTCATGGACCAAGAACACCCGCTGTGCGGGCTCACCCACCAAGCGCGCGCTGTGCGCG 155
/ DB 61 CAATTTCATGGACCAAGAACACCCGCTGTGCGGGTTGACCCCAAGCGCGCGACTGTGTGCG 120
/
/ QY 156 CTGGCGCGCGGTGTGTCTCCCGGAGCGCGCGGTGGAGGTTCCGGACGCTGCACCCG 215
/ DB 121 CTGGGGCCCGCGGTGTGTCTACGTGAGGTGCCGGGTGGAGGTTCCGGACGCTGCACCCG 180
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/ QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275
/ DB 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
/
/ QY 276 GGCTCGCTGTGCTGTATGCGCGGGTCAACCCGTTCCGGTTTCATCGAGACCGCTGTCCG 335
/
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Medlen & Carroll, LLP
/ STREET: 220 Montgomery Street, Suite 2200
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: United States Of America
/ ZIP: 94104
/
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ FILING DATE:
/ FILING DATE:
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ingolia, Diane E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: FORS-02565
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 137:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 620 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/
/ US-08-757-653-137
/
/ Query Match 75.0%; Score 528.8; DB 2; Length 620;
/ Best Local Similarity 90.8%; Pred. No. 1.3e-101;
/ Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;
/
/ QY 36 ATCAACATCCGTCAGTCGTGCGCGCATCAAGAGAGTTCTTCGGACCAAGCCAGCTGTCC 95
/ DB 1 ATCAACATCCGCGGTGTGTCGCCGATCAAGAGAGTTCTTCGGACCAAGCCAGCTGTGAGC 60
/
/ QY 96 CAGTTCATGGACCAAGAACACCCGCTGTGCGGGCTCACCCACCAAGCGCGCGCTGTGCGCG 155
/ DB 61 CAATTTCATGGACCAAGAACACCCGCTGTGCGGGTTGACCCCAAGCGCGCGACTGTGTGCG 120
/
/ QY 156 CTGGCGCGCGGTGTGTCTCCCGGAGCGCGCGGTGGAGGTTCCGGACGCTGCACCCG 215
/ DB 121 CTGGGGCCCGCGGTGTGTCTACGTGAGGTGCCGGGTGGAGGTTCCGGACGCTGCACCCG 180
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/ QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275
/ DB 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
/
/ QY 276 GGCTCGCTGTGCTGTATGCGCGGGTCAACCCGTTCCGGTTTCATCGAGACCGCTGTCCG 335
/ DB 241 GGCTCGCTGTGCTGTATGCGCGGGTCAACCCGTTCCGGTTTCATCGAAACCGCTGTACCGC 300
/
/ QY 336 AAGGTGTTGTCAGCGGTGTGTACCCAGAGATCCACTACTCAACCGCGCGACGAGGAGAC 395
/ DB 301 AAGGTGTTGTCAGCGGTGTGTAGCAGAGATCTGTACTTCACTGACCGCGCGACGAGGAGAC 360
/
/ QY 396 CGCCACGTTGGTGGCGAGCCCAACTCGCGGATCGACGACCAAGGGCGGTTCCGCGAGGCC 455
/ DB 361 CGCCACGTTGGTGGCACAGGCCAATTCCGCGGATCGATGCGGAGCGGTCTGCTTCGAGCCG 420
/
/ QY 456 CGGTTGCTGGTTCGCGCGGAGCGCGGAGGTTCGAGTACGTGCTTCGTCGAGGTGGAC 515
/ DB 421 CGCGTGTGTTGTCGCGCGGAGCGCGGAGGTGGAGTACGTGCTTCGTCGAGGTGGAC 480
/
/ QY 516 TACATGAGAGCTGTGCGCGCGGACAGATGGTGTGCGGTGGCCACCGCGGATGATCCCGTCTCTC 575
/ DB 481 TACATGAGAGCTGTGCGCGCGGACAGATGGTGTGCGGTGGCCACCGCGGATGATCCCTTCTCTG 540
/
/ QY 576 GAGCAGCAGCAGCCCAACCGTGTCCCTGTGATGGCGCGCAACATGACGCGCGCGGTTCG 635
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Db      241 GGTCTGCTCGGTGTACGCGCGGTCAACCGTTCGGGTTTCATCGAAGCGCGTACCGC 300
QY      336 AAGGTGGTCGACGGCGTGTGTCACCGACGAGATCCACTACCTGACCGCCGACGAGGAGGAC 395
Db      301 AAGGTGGTCGACGGCGTGTGTCACCGACGAGATCGTGTACCTGACCGCCGACGAGGAGGAC 360
QY      396 CGCCACGTGGTGGCGGCGCCAACTCGCCGATCGACGACAAGGGCGGTTTCGGGAGGCC 455
Db      361 CGCCACGTGGTGGCACAGGCCCAATTGCGCGATCGATGCGGACGGTGCCTTCGTCAGCCG 420
QY      456 CGGGTCTCTGCTCCGCGCAAGCGGCGGAGGTGCGAGTACGTGCCCTCGTCCGAGGTGGAC 515
Db      421 CGCGTCTGCTCGCGCGCAAGCGGCGGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 480
QY      516 TACATGGACGTGTGCGCCGCGCAGATGGTGTGCGTGGGCCAACCGCATGATCCCGTTCTTC 575
Db      481 TACATGGACGTGTGCGCCCGCCAGATGGTGTGCGTGGGCCAACCGCATGATCCCTTCTTG 540
QY      576 GAGCAGGACGACGCCAACCGTGCCTGATGGGGGCCAACATGACAGGCCGAGCGGTTCGG 635
Db      541 GAGCAGGACGACGCCAACCGTGCCTCATGGGGGCCAACATGACAGGCCGAGCGGTTCGG 600
QY      636 CTGGTCCGACGAGGCGCC 655
Db      601 CTGGTCCGTAGCAGGCCCC 620

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Search completed: August 24, 2005, 22:24:58  
 Job time : 115.459 secs

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GenCore version 5.1.6  
Copyright (C) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds  
(without alignments)  
10213.139 Million cell updates/sec

Title: US-09-285-306-7  
Perfect score: 705  
Sequence: 1 cccaggacgtggagcgatc.....ggcgatcgacgcgcgacgt 705

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 3271544945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications NA:\*

1:	/cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
2:	/cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
3:	/cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq.*
4:	/cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq.*
5:	/cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq.*
6:	/cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
7:	/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq.*
8:	/cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq.*
9:	/cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq.*
10:	/cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq.*
11:	/cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq.*
12:	/cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
13:	/cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
14:	/cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq.*
15:	/cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq.*
16:	/cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq.*
17:	/cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
18:	/cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq.*
19:	/cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq.*
20:	/cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
21:	/cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
22:	/cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
23:	/cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
24:	/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
25:	/cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
26:	/cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	ID	Description
1	705	100.0	705	US-09-285-306-4
2	705	100.0	705	US-09-285-306-5
3	705	100.0	705	US-09-285-306-6
4	705	100.0	705	US-09-285-306-7
5	705	100.0	705	US-09-285-306-8
6	705	100.0	705	US-09-285-306-9
7	705	100.0	705	US-09-285-306-12

8	705	100.0	705	US-09-285-306-13	Sequence 13, Appl
9	705	100.0	705	US-09-285-306-14	Sequence 14, Appl
10	705	100.0	705	US-09-285-306-15	Sequence 15, Appl
11	705	100.0	705	US-09-285-306-16	Sequence 16, Appl
12	703.4	99.8	705	US-09-285-306-17	Sequence 17, Appl
13	695	98.6	705	US-09-285-306-18	Sequence 18, Appl
14	693.4	98.4	705	US-09-285-306-19	Sequence 19, Appl
15	691	98.0	705	US-09-285-306-20	Sequence 20, Appl
16	691	98.0	3444	US-10-282-122A-25737	Sequence 21, Appl
17	687	97.4	687	US-09-285-306-21	Sequence 22, Appl
18	687	97.4	687	US-09-285-306-22	Sequence 23, Appl
19	687	97.4	687	US-09-285-306-23	Sequence 24, Appl
20	687	97.4	687	US-09-285-306-24	Sequence 25, Appl
21	687	97.4	687	US-09-285-306-25	Sequence 26, Appl
22	687	97.4	687	US-09-285-306-26	Sequence 27, Appl
23	687	97.4	687	US-09-285-306-27	Sequence 28, Appl
24	687	97.4	687	US-09-285-306-28	Sequence 29, Appl
25	660.2	93.6	705	US-09-285-306-29	Sequence 30, Appl
26	658.6	93.4	705	US-09-285-306-30	Sequence 31, Appl
27	655.4	93.0	705	US-09-285-306-31	Sequence 32, Appl
28	655.4	93.0	705	US-09-285-306-32	Sequence 33, Appl
29	655.4	93.0	705	US-09-285-306-33	Sequence 34, Appl
30	655.4	93.0	705	US-09-285-306-34	Sequence 35, Appl
31	655.4	93.0	705	US-09-285-306-35	Sequence 36, Appl
32	653.8	92.7	705	US-09-285-306-36	Sequence 37, Appl
33	653.8	92.7	705	US-09-285-306-37	Sequence 38, Appl
34	653.8	92.7	705	US-09-285-306-38	Sequence 39, Appl
35	653.8	92.7	705	US-09-285-306-39	Sequence 40, Appl
36	653.8	92.7	705	US-09-285-306-40	Sequence 41, Appl
37	652.2	92.5	705	US-09-285-306-41	Sequence 42, Appl
38	652.2	92.5	705	US-09-285-306-42	Sequence 43, Appl
39	652.2	92.5	705	US-09-285-306-43	Sequence 44, Appl
40	652.2	92.5	705	US-09-285-306-44	Sequence 45, Appl
41	642.2	91.1	687	US-09-285-306-45	Sequence 46, Appl
42	642.2	91.1	687	US-09-285-306-46	Sequence 47, Appl
43	637.4	90.4	687	US-09-285-306-47	Sequence 48, Appl
44	635.8	90.2	687	US-09-285-306-48	Sequence 49, Appl
45	635.8	90.2	687	US-09-285-306-49	Sequence 50, Appl

## ALIGNMENTS

RESULT 1  
US-09-285-306-4  
; Sequence 4, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gengrass, Thomas  
; APPLICANT: Drenkow, Jorg  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285.306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 4  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-4

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 CCCAGGACGTGGAGCGGATCAACCGAGACCCCTGATCAACATCGTCCAGTCGTCGGCGG 60  
Db 1 CCCAGGACGTGGAGCGGATCAACCGAGACCCCTGATCAACATCGTCCAGTCGTCGGCGG 60

QY 61 CGATCAAGAGTCTTTCGGCACACGACAGCTGTCCAGTTCATGACAGAACAAACCGC 120  
Db |||||  
61 CGATCAAGAGTCTTTCGGCACACGACAGCTGTCCAGTTCATGACAGAACAAACCGC 120  
QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGCTGGGCGGCTGTCTCCGGG 180  
Db |||||  
121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGCTGGGCGGCTGTCTCCGGG 180  
QY 181 AGCGGCGGGCTGAGGTCCGCGACGTCGACCCCTCCACTACGGCCGGATGTGCCGA 240  
Db |||||  
181 AGCGGCGGGCTGAGGTCCGCGACGTCGACCCCTCCACTACGGCCGGATGTGCCGA 240  
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300  
Db |||||  
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300  
QY 301 TCAACCCGTTCCGGTTTCAGAGCGCGTACCGCAAGGTGGTCCAGCGGTGTCCACG 360  
Db |||||  
361 ACGAGATCCACTACCTGACCGCGACGAGGAGCGCCACGTTGTCGCGAGGCCAACT 420  
Db |||||  
361 ACGAGATCCACTACCTGACCGCGACGAGGAGCGCCACGTTGTCGCGAGGCCAACT 420  
QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCCGGTGTGTCGCCGCAAGCGG 480  
Db |||||  
421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCCGGTGTGTCGCCGCAAGCGG 480  
QY 481 GCGAGGTGAGTACGTGTCCTCGTCCGAGGTGGAATACATGACGAGTGTGTCGCCGCGCAGA 540  
Db |||||  
481 GCGAGGTGAGTACGTGTCCTCGTCCGAGGTGGAATACATGACGAGTGTGTCGCCGCGCAGA 540  
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACCCAAACGTCGCC 600  
Db |||||  
541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACCCAAACGTCGCC 600  
QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGTCGCGAGGAGCGCGCTGG 660  
Db |||||  
601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGTCGCGAGGAGCGCGCTGG 660  
QY 661 TGGGACCCGCGATGAGCTGCGCGCGCGATGCGAGCGCGGACGT 705  
Db |||||  
661 TGGGACCCGCGATGAGCTGCGCGCGCGATGCGAGCGCGGACGT 705

RESULT 2  
US-09-285-306-5  
; Sequence 5, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 5  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-5  
Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCAGGAGTGGAGCGATCACCGCAGACCCCTGATCAACATCCGTCATCGTGTGGCGG 60  
|||||

Db 1 CCCAGGAGTGGAGCGATCACCGCAGACCCCTGATCAACATCCGTCATCGTGTGGCGG 60  
QY 61 CGATCAAGAGTCTTTCGGCACACGACAGCTGTCCAGTTCATGACAGAACAAACCGC 120  
Db |||||  
61 CGATCAAGAGTCTTTCGGCACACGACAGCTGTCCAGTTCATGACAGAACAAACCGC 120  
QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGCTGGGCGGCTGTCTCCGGG 180  
Db |||||  
121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGCTGGGCGGCTGTCTCCGGG 180  
QY 181 AGCGGCGGGCTGAGGTCCGCGACGTCGACCCCTCCACTACGGCCGGATGTGCCGA 240  
Db |||||  
181 AGCGGCGGGCTGAGGTCCGCGACGTCGACCCCTCCACTACGGCCGGATGTGCCGA 240  
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300  
Db |||||  
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300  
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGGTCCAGCGGTGTCCACG 360  
Db |||||  
361 ACGAGATCCACTACCTGACCGCGACGAGGAGCGCCACGTTGTCGCGAGGCCAACT 420  
Db |||||  
361 ACGAGATCCACTACCTGACCGCGACGAGGAGCGCCACGTTGTCGCGAGGCCAACT 420  
QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCCGGTGTGTCGCCGCAAGCGG 480  
Db |||||  
421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCCGGTGTGTCGCCGCAAGCGG 480  
QY 481 GCGAGGTGAGTACGTGTCCTCGTCCGAGGTGGAATACATGAGACGTGTGTCGCCGCGCAGA 540  
Db |||||  
481 GCGAGGTGAGTACGTGTCCTCGTCCGAGGTGGAATACATGAGACGTGTGTCGCCGCGCAGA 540  
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACCCAAACGTCGCC 600  
Db |||||  
541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACCCAAACGTCGCC 600  
QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGTCGCGAGGAGCGCGCTGG 660  
Db |||||  
601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGTCGCGAGGAGCGCGCTGG 660  
QY 661 TGGGACCCGCGATGAGCTGCGCGCGCGATGCGAGCGCGGACGT 705  
Db |||||  
661 TGGGACCCGCGATGAGCTGCGCGCGCGATGCGAGCGCGGACGT 705

RESULT 3  
US-09-285-306-6  
; Sequence 6, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 6  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-6  
Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCAGGAGTGGAGCGATCACCGCAGACCCCTGATCAACATCCGTCATCGTGTGGCGG 60  
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QY 1 CCAGGACGTGGAGCGATCACACCGCAGACCTGATCAACATCCGTCCAGTCTGTGCGG 60
Db 1 CCAGGACGTGGAGCGATCACACCGCAGACCTGATCAACATCCGTCCAGTCTGTGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACACCCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACACCCGC 120
QY 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGGGCTGGGCGCGGTGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGGGCTGGGCGCGGTGTCTGTCCGGG 180
QY 181 AGCGGCGCGGCTGGAGTCCCGACAGTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCCGACAGTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGACCCCGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTATGCGCGG 300
Db 241 TCAGACCCCGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTATGCGCGG 300
QY 301 TCAACCGGTTCCGGTTCATCGAGACCGCTACCGAAGGTGGTCCAGCGGCAACT 360
Db 301 TCAACCGGTTCCGGTTCATCGAGACCGCTACCGAAGGTGGTCCAGCGGCAACT 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGGTTCCGGAGGCGCGGTTGCTGGTCCGCGCAAGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGGTTCCGGAGGCGCGGTTGCTGGTCCGCGCAAGCGG 480
QY 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATACATGACGCTGTCCGCGCAGA 540
Db 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATACATGACGCTGTCCGCGCAGA 540
QY 541 TGTGTCTGTGGCGACCGCGATCCCTTCCTCGAGTGGTTCATGAGCGTGTCCGCGCC 600
Db 541 TGTGTCTGTGGCGACCGCGATCCCTTCCTCGAGTGGTTCATGAGCGTGTCCGCGCC 600
QY 601 TGATGGCGCCAACTGACGCGCGGTTCCGCTGTGGTCCGAGCGAGGCGCGCTGG 660
Db 601 TGATGGCGCCAACTGACGCGCGGTTCCGCTGTGGTCCGAGCGAGGCGCGCTGG 660
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGCATGGAGCTGCGCGCGGCGATCGACGCGCGACGT 705

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RESULT 4

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US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

```

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;

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Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCAGGACGTGGAGCGATCACACCGCAGACCTGATCAACATCCGTCCAGTCTGTGCGG 60
Db 1 CCAGGACGTGGAGCGATCACACCGCAGACCTGATCAACATCCGTCCAGTCTGTGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACACCCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACACCCGC 120
QY 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGGGCTGGGCGCGGTGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGGGCTGGGCGCGGTGTCTGTCCGGG 180
QY 181 AGCGGCGCGGCTGGAGTCCCGACAGTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCCGACAGTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGACCCCGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTATGCGCGG 300
Db 241 TCAGACCCCGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTATGCGCGG 300
QY 301 TCAACCGGTTCCGGTTCATCGAGACCGCTACCGAAGGTGGTCCAGCGGCAACT 360
Db 301 TCAACCGGTTCCGGTTCATCGAGACCGCTACCGAAGGTGGTCCAGCGGCAACT 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGGTTCCGGAGGCGCGGTTGCTGGTCCGCGCAAGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGGTTCCGGAGGCGCGGTTGCTGGTCCGCGCAAGCGG 480
QY 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATACATGACGCTGTCCGCGCAGA 540
Db 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATACATGACGCTGTCCGCGCAGA 540
QY 541 TGTGTCTGTGGCGACCGCGATCCCTTCCTCGAGTGGTTCATGAGCGTGTCCGCGCC 600
Db 541 TGTGTCTGTGGCGACCGCGATCCCTTCCTCGAGTGGTTCATGAGCGTGTCCGCGCC 600
QY 601 TGATGGCGCCAACTGACGCGCGGTTCCGCTGTGGTCCGAGCGAGGCGCGCTGG 660
Db 601 TGATGGCGCCAACTGACGCGCGGTTCCGCTGTGGTCCGAGCGAGGCGCGCTGG 660
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGCATGGAGCTGCGCGCGGCGATCGACGCGCGACGT 705

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RESULT 5

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US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

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```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1 CCCAGAGCTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60

QY 61 CGATCAAGAGATTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGATTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120

QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCCTGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCCTGG 180

QY 181 AGCGGGCGGGCTGGAGTTCGGGAGCTGACCCGTCCCACTACCGCCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGGAGCTGACCCGTCCCACTACCGCCGGATGTGCCGA 240

QY 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCCGGG 300
Db 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCCGGG 300

QY 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGTGTGTGACCGCGTGGTCA 360
Db 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGTGTGTGACCGCGTGGTCA 360

QY 361 ACAGATCCACTACCTGACCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 420
Db 361 ACAGATCCACTACCTGACCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 420

QY 421 CGCCGATCGACGACAAAGGCGCGGTTCCGGAGGCGCGGTTGCTGTCCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGGTTCCGGAGGCGCGGTTGCTGTCCGCGCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGACGCTGTCCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGACGCTGTCCGCGCGCCAGA 540

QY 541 TGGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGACGCTGTCCGCGCGCCAGA 600
Db 541 TGGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGACGCTGTCCGCGCGCCAGA 600

QY 601 TGATGGGCGCCAACTGACGAGCGCCAGGCGGTTCCGCTGTGTGCGCAGGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAACTGACGAGCGCCAGGCGGTTCCGCTGTGTGCGCAGGAGGCGCGCTGG 660

QY 661 TGGGCAACCGGCATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705
Db 661 TGGGCAACCGGCATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705
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RESULT 6

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US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
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; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
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```
US-09-285-306-9

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1 CCCAGAGCTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60

QY 61 CGATCAAGAGATTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGATTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120

QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCCTGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCCTGG 180

QY 181 AGCGGGCGGGCTGGAGTTCGGGAGCTGACCCGTCCCACTACCGCCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGGAGCTGACCCGTCCCACTACCGCCGGATGTGCCGA 240

QY 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCCGGG 300
Db 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCCGGG 300

QY 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGTGTGTGACCGCGTGGTCA 360
Db 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGTGTGTGACCGCGTGGTCA 360

QY 361 ACAGATCCACTACCTGACCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 420
Db 361 ACAGATCCACTACCTGACCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 420

QY 421 CGCCGATCGACGACAAAGGCGCGGTTCCGGAGGCGCGGTTGCTGTCCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGGTTCCGGAGGCGCGGTTGCTGTCCGCGCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGACGCTGTCCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGACGCTGTCCGCGCGCCAGA 540

QY 541 TGGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGACGCTGTCCGCGCGCCAGA 600
Db 541 TGGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGACGCTGTCCGCGCGCCAGA 600

QY 601 TGATGGGCGCCAACTGACGAGCGCCAGGCGGTTCCGCTGTGTGCGCAGGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAACTGACGAGCGCCAGGCGGTTCCGCTGTGTGCGCAGGAGGCGCGCTGG 660

QY 661 TGGGCAACCGGCATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705
Db 661 TGGGCAACCGGCATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705
```

RESULT 7

```
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
```

```

; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCAACCCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
   |||||
Db 1 CCAGAGCTGGAGGCGATCAACCCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
   |||||
QY 61 CGATCAAGAGATTCTTCGCGACACGACGAGCTGCCAGTTCATGGACAGACAAACCCG 120
   |||||
Db 61 CGATCAAGAGATTCTTCGCGACACGACGAGCTGCCAGTTCATGGACAGACAAACCCG 120
   |||||
QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGCGCTGGCGCGCTGCTGTCCCGGG 180
   |||||
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGCGCTGGCGCGCTGCTGTCCCGGG 180
   |||||
QY 181 AGCGGCGCGGCTGGAGGTCCTCAACATCGGTCGATCGGCTCGCTGTCGCGTGTATGCGCGG 240
   |||||
Db 181 AGCGGCGCGGCTGGAGGTCCTCAACATCGGTCGATCGGCTCGCTGTCGCGTGTATGCGCGG 240
   |||||
QY 241 TCGAGACCCCGAGGTCCTCAACATCGGTCGATCGGCTCGCTGTCGCGTGTATGCGCGG 300
   |||||
Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCGATCGGCTCGCTGTCGCGTGTATGCGCGG 300
   |||||
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGCGCGTGGTCAACG 360
   |||||
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGCGCGTGGTCAACG 360
   |||||
QY 361 AGAGATCCACTACTGACCGCGGACGAGAGGACCGCCACCGTGGTGGCGAGGCCAACT 420
   |||||
Db 361 AGAGATCCACTACTGACCGCGGACGAGAGGACCGCCACCGTGGTGGCGAGGCCAACT 420
   |||||
QY 421 CGCGGATCGAGACGAGGCGCGTTTCGCGAGGCGCGGTTGCTGGTCCGCGCAAGGCGG 480
   |||||
Db 421 CGCGGATCGAGACGAGGCGCGTTTCGCGAGGCGCGGTTGCTGGTCCGCGCAAGGCGG 480
   |||||
QY 481 GCGAGTCCAGTACGTGCGCTCTGTCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
   |||||
Db 481 GCGAGTCCAGTACGTGCGCTCTGTCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
   |||||
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGCCC 600
   |||||
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGCCC 600
   |||||
QY 601 TGATGGGCGCCAAACATGCGAGCGCGAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
   |||||
Db 601 TGATGGGCGCCAAACATGCGAGCGCGAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
   |||||
QY 661 TGGGCAACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
   |||||
Db 661 TGGGCAACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

```

RESULT 8

```

US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

```

RESULT 9

```

US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03

```

```
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGCGGG 60
   |||||
Db 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGCGGG 60
   |||||

Qy 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAGAACACCCGC 120
   |||||
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAGAACACCCGC 120
   |||||

Qy 121 TGTCCGGGGTCAACCCACAAGCCCGCTGTCCGGCGCTGGGCCCGGGTGGTCTGTCCCGGG 180
   |||||
Db 121 TGTCCGGGGTCAACCCACAAGCCCGCTGTCCGGCGCTGGGCCCGGGTGGTCTGTCCCGGG 180
   |||||

Qy 181 AGCGGGCCGGGTGGAGGTCGCGACGTGCAACCCGTCCCACTACGSCCGGATGTGCCCGA 240
   |||||
Db 181 AGCGGGCCGGGTGGAGGTCGCGACGTGCAACCCGTCCCACTACGSCCGGATGTGCCCGA 240
   |||||

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGTGTATGCGCGGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGTGTATGCGCGGG 300
   |||||

Qy 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGCACGCGTGGTCACCG 360
   |||||
Db 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGCACGCGTGGTCACCG 360
   |||||

Qy 361 ACGAGATCCACTACCTGACCCGCGCAGAGGAGCCGACCGTGTGGCGCAGGCCAACT 420
   |||||
Db 361 ACGAGATCCACTACCTGACCCGCGCAGAGGAGCCGACCGTGTGGCGCAGGCCAACT 420
   |||||

Qy 421 CGCCGATCGACGACAAAGGCGCGGTTCCGGAGGCGCCGGTGTCTGGTCCGCGCAAGGGCG 480
   |||||
Db 421 CGCCGATCGACGACAAAGGCGCGGTTCCGGAGGCGCCGGTGTCTGGTCCGCGCAAGGGCG 480
   |||||

Qy 481 GCGAGGTCGAGTACGTGCGCTTCGAGAGGCGGTCGAGAGGCGGTCGCGCGCCAGA 540
   |||||
Db 481 GCGAGGTCGAGTACGTGCGCTTCGAGAGGCGGTCGAGAGGCGGTCGCGCGCCAGA 540
   |||||

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCCAACCGTGC 600
   |||||
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCCAACCGTGC 600
   |||||

Qy 601 TGATGGCGCCCAACATGACGCGCCAGCGGGTTCGCTGGTGGCAGGAGGCGCGCTGG 660
   |||||
Db 601 TGATGGCGCCCAACATGACGCGCCAGCGGGTTCGCTGGTGGCAGGAGGCGCGCTGG 660
   |||||

Qy 661 TGGGCACCGGCATGAGGTCGCGCGCGGATCGAGCGCGGACGCT 705
   |||||
Db 661 TGGGCACCGGCATGAGGTCGCGCGCGGATCGAGCGCGGACGCT 705
   |||||
```

```
RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; FILING DATE: 1999-04-02
```

```
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGCGGG 60
   |||||
Db 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGCGGG 60
   |||||

Qy 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACGACGAGAACCCGC 120
   |||||
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACGAGAACCCGC 120
   |||||

Qy 121 TGTCCGGGGTCAACCCACAAGCCCGCTGTCCGGCGCTGGGCCCGGGTGGTCTGTCCCGGG 180
   |||||
Db 121 TGTCCGGGGTCAACCCACAAGCCCGCTGTCCGGCGCTGGGCCCGGGTGGTCTGTCCCGGG 180
   |||||

Qy 181 AGCGGGCCGGGTGGAGGTCGCGACGTGCAACCCGTCCCACTACGSCCGGATGTGCCCGA 240
   |||||
Db 181 AGCGGGCCGGGTGGAGGTCGCGACGTGCAACCCGTCCCACTACGSCCGGATGTGCCCGA 240
   |||||

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGTGTATGCGCGGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGTGTATGCGCGGG 300
   |||||

Qy 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGCACGCGTGGTCACCG 360
   |||||
Db 301 TCAACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGCACGCGTGGTCACCG 360
   |||||

Qy 361 ACGAGATCCACTACCTGACCCGCGCAGAGGAGCCGACCGTGTGGCGCAGGCCAACT 420
   |||||
Db 361 ACGAGATCCACTACCTGACCCGCGCAGAGGAGCCGACCGTGTGGCGCAGGCCAACT 420
   |||||

Qy 421 CGCCGATCGACGACAAAGGCGCGGTTCCGGAGGCGCCGGTGTCTGGTCCGCGCAAGGGCG 480
   |||||
Db 421 CGCCGATCGACGACAAAGGCGCGGTTCCGGAGGCGCCGGTGTCTGGTCCGCGCAAGGGCG 480
   |||||

Qy 481 GCGAGGTCGAGTACGTGCGCTTCGAGAGGCGGTCGAGAGGCGGTCGCGCGCCAGA 540
   |||||
Db 481 GCGAGGTCGAGTACGTGCGCTTCGAGAGGCGGTCGAGAGGCGGTCGCGCGCCAGA 540
   |||||

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCCAACCGTGC 600
   |||||
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCCAACCGTGC 600
   |||||

Qy 601 TGATGGCGCCCAACATGACGCGCCAGCGGGTTCGCTGGTGGCAGGAGGCGCGCTGG 660
   |||||
Db 601 TGATGGCGCCCAACATGACGCGCCAGCGGGTTCGCTGGTGGCAGGAGGCGCGCTGG 660
   |||||

Qy 661 TGGGCACCGGCATGAGGTCGCGCGCGGATCGAGCGCGGACGCT 705
   |||||
Db 661 TGGGCACCGGCATGAGGTCGCGCGCGGATCGAGCGCGGACGCT 705
   |||||
```

```
RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
```

```

; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

```

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
DB 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGGCACCGCAGCAGCTGTCAGATTCCAGTTCATGGACCGAACAACCCGC 120
DB 61 CGATCAAGAGTTCTTTCGGCACCGCAGCAGCTGTCAGATTCCAGTTCATGGACCGAACAACCCGC 120
QY 121 TGTTCGGGGCTCACCCCAAGCGCGCTGTCGCGCGTGGCGCGGTGTCTGTCCCGGG 180
DB 121 TGTTCGGGGCTCACCCCAAGCGCGCTGTCGCGCGTGGCGCGGTGTCTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGGTCCCGGACGTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGGCGGGCTGGAGGTCCCGGACGTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
DB 241 TCAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGCAAGGTGTGCGAGCGGTGTCAACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGCAAGGTGTGCGAGCGGTGTCAACCG 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGACCGCACGTCGTGGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGACCGCACGTCGTGGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGGTTTCGGAGGCGCGGTTGCTGTGCTCGCGCGCAAGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGGTTTCGGAGGCGCGGTTGCTGTGCTCGCGCGCAAGCGG 480
QY 481 GCGAGTTCGAGTACGTCCTCGTCGAGTGGACTACATGGACGTTGTCGCGCGCGCAGA 540
DB 481 GCGAGTTCGAGTACGTCCTCGTCGAGTGGACTACATGGACGTTGTCGCGCGCGCAGA 540
QY 541 TGTGTTCGGTGGCGACCGCGATGATCCGTTCTCGAGCAACGACGCGACCGTGGCCC 600
DB 541 TGTGTTCGGTGGCGACCGCGATGATCCGTTCTCGAGCAACGACGCGACCGTGGCCC 600
QY 601 TGATGGCGCCAAATCGACGCGCGGTTCCGTCGTGTGCGACGCGAGCGCGCTGG 660
DB 601 TGATGGCGCCAAATCGACGCGCGGTTCCGTCGTGTGCGACGCGAGCGCGCTGG 660
QY 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACCGCGGCGAGT 705
DB 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACCGCGGCGAGT 705

```

```

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.

```

```

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

```

```

Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 1.9e-155;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
DB 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGGCACCGCAGCAGCTGTCAGATTCCAGTTCATGGACCGAACAACCCGC 120
DB 61 CGATCAAGAGTTCTTTCGGCACCGCAGCAGCTGTCAGATTCCAGTTCATGGACCGAACAACCCGC 120
QY 121 TGTTCGGGGCTCACCCCAAGCGCGCTGTCGCGCGTGGCGCGGTGTCTGTCCCGGG 180
DB 121 TGTTCGGGGCTCACCCCAAGCGCGCTGTCGCGCGTGGCGCGGTGTCTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGGTCCCGGACGTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGGCGGGCTGGAGGTCCCGGACGTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
DB 241 TCAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGCAAGGTGTGCGAGCGGTGTCAACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGCAAGGTGTGCGAGCGGTGTCAACCG 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGACCGCACGTCGTGGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGACCGCACGTCGTGGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGGTTTCGGAGGCGCGGTTGCTGTGCTCGCGCGCAAGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGGTTTCGGAGGCGCGGTTGCTGTGCTCGCGCGCAAGCGG 480
QY 481 GCGAGTTCGAGTACGTCCTCGTCGAGTGGACTACATGGACGTTGTCGCGCGCGCAGA 540
DB 481 GCGAGTTCGAGTACGTCCTCGTCGAGTGGACTACATGGACGTTGTCGCGCGCGCAGA 540
QY 541 TGTGTTCGGTGGCGACCGCGATGATCCGTTCTCGAGCAACGACGCGACCGTGGCCC 600
DB 541 TGTGTTCGGTGGCGACCGCGATGATCCGTTCTCGAGCAACGACGCGACCGTGGCCC 600
QY 601 TGATGGCGCCAAATCGACGCGCGGTTCCGTCGTGTGCGACGCGAGCGCGCTGG 660
DB 601 TGATGGCGCCAAATCGACGCGCGGTTCCGTCGTGTGCGACGCGAGCGCGCTGG 660
QY 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACCGCGGCGAGT 705
DB 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACCGCGGCGAGT 705

```

```

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas

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```

; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGGG 60
DB 1 CCCAGAGCTGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGGG 60

QY 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACGAGAACACCCGC 120
DB 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACGAGAACACCCGC 120

QY 121 TGTGGGGCTACCCACAAAGCCGCCCTGTGGCGCTGGGGCCGGTGTCTGTCCCGGG 180
DB 121 TGTGGGGCTACCCACAAAGCCGCCCTGTGGCGCTGGGGCCGGTGTCTGTCCCGGG 180

QY 181 AGCGGGCCGGGTGGAGTTCGCGACGTGTCACCGTCCGCTCCGCTCCGCTCCGCTCCG 240
DB 181 AGCGGGCCGGGTGGAGTTCGCGACGTGTCACCGTCCGCTCCGCTCCGCTCCGCTCCG 240

QY 241 TCGAGACCCCGAGAGGTCCAAACATCGGCTTCATCGGTCGCTGTCGCTGTCGCTGTCG 300
DB 241 TCGAGACCCCGAGAGGTCCAAACATCGGCTTCATCGGTCGCTGTCGCTGTCGCTGTCG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACCGCGCTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACCGCGCTGTCACCG 360

QY 361 ACGAGATCCACTACCTGACCGCGACGAGAGGACCGCGACGTCGTGGCGGAGGCGCAACT 420
DB 361 ACGAGATCCACTACCTGACCGCGACGAGAGGACCGCGACGTCGTGGCGGAGGCGCAACT 420

QY 421 CGCCGATCGAGACGAGAGGCGCGTTTCGGAGGCGCGGTCGTGGTCGCGCGAGGCGG 480
DB 421 CGCCGATCGAGACGAGAGGCGCGTTTCGGAGGCGCGGTCGTGGTCGCGCGAGGCGG 480

QY 481 GCGAGGTCGAGTACCTGTCCTCGTCGAGAGTGGACTACATGAGACGTCGCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACCTGTCCTCGTCGAGAGTGGACTACATGAGACGTCGCGCGCCAGA 540

QY 541 TGGTGTGGTGGCCACCGGATGATCCGTTCTTCGAGGACGACGACGCGCAACCGTGGCC 600
DB 541 TGGTGTGGTGGCCACCGGATGATCCGTTCTTCGAGGACGACGACGCGCAACCGTGGCC 600

QY 601 TGATGGGCGCCAAATGATGAGCGCCAGCGGTTCCGCTGTGGTGGCAGGCGCGCTGG 660
DB 601 TGATGGGCGCCAAATGATGAGCGCCAGCGGTTCCGCTGTGGTGGCAGGCGCGCTGG 660

QY 661 TGGGACCCGGCATGGAGCTGCGCGGGCGATCGACGCGCGACGT 705

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DB 661 TGGGACCCGGCATGGAGCTGCGCGGGCGATCGACGCGCGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGGG 60
DB 1 CCCAGAGCTGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCCGTCCGTGGGG 60

QY 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACGAGAACACCCGC 120
DB 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACGAGAACACCCGC 120

QY 121 TGTGGGGCTACCCACAAAGCCGCCCTGTGGCGCTGGGGCCGGTGTCTGTCCCGGG 180
DB 121 TGTGGGGCTACCCACAAAGCCGCCCTGTGGCGCTGGGGCCGGTGTCTGTCCCGGG 180

QY 181 AGCGGGCCGGGTGGAGTTCGCGACGTGTCACCGTCCGCTCCGCTCCGCTCCGCTCCG 240
DB 181 AGCGGGCCGGGTGGAGTTCGCGACGTGTCACCGTCCGCTCCGCTCCGCTCCGCTCCG 240

QY 241 TCGAGACCCCGAGAGGTCCCAACATCGGTCGTGATCGGTCGCTGTCGCTGTCGCTGTCG 300
DB 241 TCGAGACCCCGAGAGGTCCCAACATCGGTCGTGATCGGTCGCTGTCGCTGTCGCTGTCG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACCGCGCTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACCGCGCTGTCACCG 360

QY 361 ACGAGATCCACTACCTGACCGCGACGAGAGGACCGCGACGTCGTGGCGGAGGCGCAACT 420
DB 361 ACGAGATCCACTACCTGACCGCGACGAGAGGACCGCGACGTCGTGGCGGAGGCGCAACT 420

QY 421 CGCCGATCGAGACGAGAGGCGCGTTTCGGAGGCGCGGTCGTGGTCGCGCGAGGCGG 480
DB 421 CGCCGATCGAGACGAGAGGCGCGTTTCGGAGGCGCGGTCGTGGTCGCGCGAGGCGG 480

QY 481 GCGAGGTCGAGTACCTGTCCTCGTCGAGAGTGGACTACATGAGACGTCGCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACCTGTCCTCGTCGAGAGTGGACTACATGAGACGTCGCGCGCCAGA 540

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QY 541 TGGTGTGGTGGCCACCGCATGATCCCGTTCTCGAGCACGACGACGCAACCGTGCCC 600  
Db 541 TGGTGTGGTGGCCACCGCATGATCCCGTTCTCGAGCACGACGACGCAACCGTGCCC 600  
QY 601 TGATGGGCGCCAAATGACGCGCAGGCGGTTCCGTTGTCGACGAGCGCGCCGCTGG 660  
Db 601 TGATGGGCGCCAAATGACGCGCAGGCGGTTCCGTTGTCGACGAGCGCGCGCTGG 660  
QY 661 TGGGCACCGCATGGAGCTGCGCGCGCGCATGACGCGGCGGAGCT 705  
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGCATGACGCGGCGGAGCT 705

RESULT 15

US-09-285-306-10

; Sequence 10, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 10

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;

Best Local Similarity 98.0%; Pred. No. 1.6e-152;

Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
QY 61 CGATCAAGGAGTTCTTCGGCACCGCCAGCTGTCCAGTTTCATGGACAGAAACCCGC 120  
Db 61 CGATCAAGGAGTTCTTCGGCACCGCCAGCTGTCCAGTTTCATGGACAGAAACCCGC 120  
QY 121 TGTCCGGGCTCACCCACAAGCGCGGCTGTCCGGCGTGGCGCGGTGTCTGTCCCGGG 180  
Db 121 TGTCCGGGCTTGACCCACAAGCGCGGCTGTCCGGCGTGGCGCGGTGTCTGTCCCGGG 180  
QY 181 AGCGGCGCGGCTGGAGGTCCGGAGCTGCACCGCTCCCACTACGCGCGGATGTGCCGA 240  
Db 181 AGCGGCGCGGCTGGAGGTCCGGAGCTGCACCGCTCCCACTACGCGCGGATGTGCCGA 240  
QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGCGTGTATGCGCGG 300  
Db 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGCGTGTATGCGCGG 300  
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCGTACCGCAAGTGTGTGACGCGGTGGTCA 360  
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCGTACCGCAAGTGTGTGACGCGGTGGTCA 360  
QY 361 ACAGATCCACTACCTGACCGCGGAGGAGCGCCACGTCGTTGGTGGCGGAGCCAACT 420  
Db 361 ACAGATCCACTACCTGACCGCGGAGGAGCGCCACGTCGTTGGTGGCGGAGGCGCACT 420  
QY 421 CGCCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTTGCTGTGTCGCGCAAGGCGG 480  
Db 421 CGCCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTTGCTGTGTCGCGCAAGGCGG 480  
QY 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTCCGCCGCGCAGA 540

Search completed: August 25, 2005, 11:35:35

Job time : 452.661 secs

Db 481 GCGAGTTCAGTACGTGCTCCTCGTCCGAGTGGACTACATGACGCTGTCCCGCGCCAGA 540  
QY 541 TGGTGTGGTGGCCACCGCATGATCCCGTTCTCGAGCACGACGACGCAACCGTGCCC 600  
Db 541 TGGTGTGGTGGCCACCGCATGATCCCGTTCTCGAGCACGACGACGCAACCGTGCCC 600  
QY 601 TGATGGGCGCCAAATGACGCGCAGGCGGTTCCGTTGTCGACGAGCGCGCGCTGG 660  
Db 601 TGATGGGCGCCAAATGACGCGCAGGCGGTTCCGTTGTCGACGAGCGCGCGCTGG 660  
QY 661 TGGGCACCGCATGGAGCTGCGCGCGCGCATGACGCGGCGGAGCT 705  
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGCATGACGCGGCGGAGCT 705

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

QM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds  
(without alignments)  
11150.034 Million cell updates/sec

Title: US-09-285-306-8

Perfect score: 705  
Sequence: 1 cccagacgtggagcgatc.....ggcgatcgacggcgagcgt 705

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA: \*  
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2: /cgn2\_6/ptodata/1/ina/5B COMB.seq.\*  
3: /cgn2\_6/ptodata/1/ina/6A COMB.seq.\*  
4: /cgn2\_6/ptodata/1/ina/6B COMB.seq.\*  
5: /cgn2\_6/ptodata/1/ina/PCTUS COMB.seq.\*  
6: /cgn2\_6/ptodata/1/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
19	528.8	75.0	620	3	US-08-520-946-137
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21	528.8	75.0	620	3	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	509	4	US-09-887-052-1

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appli
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appli
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, App
32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
35	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
37	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
41	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
42	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
44	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
45	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App

## ALIGNMENTS

## RESULT 1

US-08-797-812-24

; Sequence 24, Application US/08797812

; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berno, Anthony J.

; APPLICANT: Stryer, Lubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, 8th Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC Compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 706 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
US-08-797-812-24

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Query Match      86.6%; Score 610.6; DB 3; Length 706;
Best Local Similarity 91.6%; Pred. No. 1.1e-118;
Matches 646; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 2 CCAGGACGTGGAGGCGATCACACCGCAGACCGTTCATCAACATCCGCGCGGTGGTCGCG 61

QY 61 CGATCAAGAGTCTTTCGGACACAGCCAGCTGTCCAGATTCTATGACAGAAACAACCCGC 120
Db 62 CGATCAAGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCATGACAGAAACAACCCGC 121

QY 121 TGTCCGGGCTACCCACAAGCCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db 122 TGTCCGGGCTGACCCACAAGCCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCAGTG 181

QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCTCCACTACGCGCCGGATGTGCCGA 240
Db 182 AGCGTCCCGGCTGGAGGTCCGCGACGTGCACCCGTCGCACTACGCGCGGATGTGCCGA 241

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTATGCGCGGG 300
Db 242 TCGAAACCCCTGAGGGGCGCAACATCGGTCTGATCGGCTCGCTGTGCGTATGCGCGGG 301

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCGACGCGGTGGTAGCG 360
Db 302 TCAACCCGTTCCGGTTTCATCGAAACGCGTACCGCAAGGTGGTTCGACGCGGTGGTAGCG 361

QY 361 ACAGATCCACTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGTGGCGAGGCCAACT 420
Db 362 ACAGATCGTGTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGTGGCACAGGCCAACT 421

QY 421 CGCGATTCAGCAACAGGCGCGGTTTCGCGAGGCGCGGTCGTGTCGTCGCGCGAAGGCGG 480
Db 422 CGCGATTCAGCAACAGGCGCGGTTTCGTCGAGCGCGCGTGTGTCGTCGCGCGAAGGCGG 481

QY 481 GCGAGTTCAGTACGTCGCTCGTCGAGGTGAGTACATGACGTCGTCGCGCGCGCAGA 540
Db 482 GCGAGTTCAGTACGTCGCTCGTCGAGGTGAGTACATGACGTCGTCGCGCGCGCAGA 541

QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGGCCC 600
Db 542 TGTGTGCGTGGCCACCGCGATGATTCCTTCCTGGAGCACGACGACGCAACCGTGGCCC 601

QY 601 TGATGGGCGCAACATGACGCGCAGCGCGGTTCGCTGTGTCGAGCGAGGCGCGCTGG 660
Db 602 TCATGGGCGCAACATGACGCGCAGCGCGGTTCGCTGTGTCGAGCGAGGCGCGCTGG 661

QY 661 TGGGACCCGCGATGAGGTCGCGCGCGCATGACGCGCGGCGAGT 705
Db 662 TGGGACCCGCGATGAGGTCGCGCGCGCATGACGCGCGGCGAGT 706
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RESULT 2  
US-09-103-840A-2  
; Sequence 2, Application US/09103840A  
; Patent No. 6294328  
; GENERAL INFORMATION:  
; APPLICANT: FLEISCHMAN, Robert D.  
; APPLICANT: WHITE, Owen R.  
; APPLICANT: FRASER, Claire M.  
; APPLICANT: VENTER, John C.  
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM  
; TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00  
; CURRENT APPLICATION NUMBER: US/09/103,840A  
; CURRENT FILING DATE: 1998-06-24  
; NUMBER OF SEQ ID NOS: 2  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 4403765  
; TYPE: DNA  
; ORGANISM: Mycobacterium tuberculosis  
; FEATURE:  
; OTHER INFORMATION: CDC 1551  
; OTHER INFORMATION: "n" bases at various positions throughout the sequence  
; OTHER INFORMATION: represent a, t, c or g  
US-09-103-840A-2

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Query Match      85.5%; Score 603; DB 3; Length 4403765;
Best Local Similarity 91.4%; Pred. No. 1.2e-116;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 762963 CCCAGACGTGGAGGCGATCACACCGCAGACCGTTCATCAACATCCGCGCGGTGGTCGCG 763022

QY 61 CGATCAAGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCATGACAGAAACAACCCGC 120
Db 763023 CGATCAAGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCATGACAGAAACAACCCGC 763082

QY 121 TGTCCGGGCTCACCCACAAGCCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db 763083 TGTCCGGGCTGACCCACAAGCCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCAGTG 763142

QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCTCCACTACGCGCGGATGTGCCGA 240
Db 763143 AGCGTCCCGGCTGGAGGTCCGCGACGTGCACCCGTCGCACTACGCGCGGATGTGCCGA 763202

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGGG 300
Db 763203 TCGAAACCCCTGAGGGGCGCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGGG 763262

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCACGCGGTGGTCACCG 360
Db 763263 TCAACCCGTTCCGGTTTCATCGAAACGCGTACCGCAAGGTGGTTCACGCGGTGGTAGCG 763322

QY 361 ACAGATCCACTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGTGGCGAGGCCAACT 420
Db 763323 ACAGATCGTGTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGTGGCACAGGCCAACT 763382

QY 421 CGCGATTCAGCAACAGGCGCGGTTTCGCGAGGCGCGGTCGTGTCGCGCGCAAGGCGG 480
Db 763383 CGCGATTCAGTCCGACGCGTTCGCTTCGTCGAGCGCGCGTGTGTCGCGCGCAAGGCGG 763442

QY 481 GCGAGTTCAGTACGTCGCTCGTCGAGGTGAGTACATGACGTCGTCGCGCGCGCAGA 540
Db 763443 GCGAGTTCAGTACGTCGCTCGTCGAGGTGAGTACATGACGTCGTCGCGCGCGCAGA 763502

QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGGCCC 600
Db 763503 TGTGTGCGTGGCCACCGCGATGATTCCTTCCTCGAGCACGACGACGCAACCGTGGCCC 763562

QY 601 TGATGGGCGCAACATGACGCGCAGCGCGGTTCGCTGTGTCGAGCGAGGCGCGCTGG 660
Db 763563 TCATGGGCGCAACATGACGCGCAGCGCGGTTCGCTGTGTCGAGCGAGGCGCGCTGG 763622

QY 661 TGGGACCCGCGATGAGGTCGCGCGCGCATGACGCGCGGCGAGT 699
Db 763623 TGGGACCCGCGATGAGGTCGCGCGCGCATGACGCGCGGCGAGT 763661
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RESULT 3  
US-09-103-840A-1  
; Sequence 1, Application US/09103840A  
; Patent No. 6294328  
; GENERAL INFORMATION:

; APPLICANT: FLEISCHMAN, Robert D. ; APPLICANT: WHITE, Owen R. ; APPLICANT: FRASER, Claire M. ; APPLICANT: VENTER, John C. ; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM ; TITLE OF INVENTION: TUBERCULOSIS ; FILE REFERENCE: 24366-20007.00 ; CURRENT APPLICATION NUMBER: US/09/103,840A ; CURRENT FILING DATE: 1998-06-24 ; NUMBER OF SEQ ID NOS: 2 ; SOFTWARE: PatentIn Ver. 2.1 ; SEQ ID NO 1 ; LENGTH: 4411529 ; TYPE: DNA ; ORGANISM: Mycobacterium tuberculosis ; OTHER INFORMATION: H37Rv US-09-103-840A-1									
Query Match 85.5%; Score 603; DB 3; Length 4411529; Best Local Similarity 91.4%; Pred. No. 1.2e-116; Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;									
QY	1	CCCAGGACGTGAGCGCATCACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG	60						
Db	761003	CCCAGGACGTGAGCGCATCACCGCAGAGTTGATCAACATCCGGCGGTGTTGCGCG	761062						
QY	61	CGATCAAGGAGTTCTTTCGGCACCCAGCCAGCTGTCCAGTTCATGGACCAAGAACACCCGC	120						
Db	761063	CGATCAAGGAGTTCTTTCGGCACCCAGCCAGCTGAGCCAATTCATGGACCAAGAACACCCGC	761122						
QY	121	TGTCGGGGCTCACCCACAAGCGCGCCTGTGCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG	180						
Db	761123	TGTCCGGGTTTGACCCACAAGCGCGCAGCTGTGCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG	761182						
QY	181	AGCGGCGCGGCTCGAGTCCGCGACGTCGACCCGTCCTCCACTACGCGCGGATGTGCCCGA	240						
Db	761183	AGGTGCGGGCTCGAGTCCGCGACGTCGACCCGTCCTCCACTACGCGCGGATGTGCCCGA	761242						
QY	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTCTGGTGTATGCGCGGG	300						
Db	761243	TCGAAACCCCTGAGGGGCCCAACATCGGTCTGTATCGGCTCGCTGTCTGGTGTACGCGCGGG	761302						
QY	301	TCAAACCCGCTCGGTTTCATCGAGACGCGGTACCGAAGTGGTCTGACGGCGTGGTCAACCG	360						
Db	761303	TCAAACCCGTTTCGGGTTTCATCGAAACGCGGTACCGAAGTGGTCTGACGGCGTGGTTCAGCG	761362						
QY	361	ACGAGATCCACTACTGACCCGCGACGAGGAGGACCGCCAGTCGTTGGTGGCGCAGGCCAACT	420						
Db	761363	ACGAGATCGTGTACTCTGACCCCGACGAGGAGGACCGCCAGTCGTTGGTGGCGCAGGCCAACT	761422						
QY	421	CGCGGATCGACGACAAAGGGCGGTTTCGGCGAGGGCCCGGGTCTGTCTCGCGCGCAAGGCGG	480						
Db	761423	CGCGGATCGATCGGCAAGGTGCTTCTGTCTGAGCGCGCGGTGCTGTCTCGCGCGCAAGGCGG	761482						
QY	481	GCAGGTCGAGTACGTGCCCTTCGTCCGAGGTGGACTACATGGACGTGTCTCGCGCGGCCAGA	540						
Db	761483	GCAGGTCGAGTACGTGCCCTTCGTCTGAGGTGGACTACATGGACGTCTCTCGCGCGGCCAGA	761542						
QY	541	TGGTGTCTGGTGGCCACCGCGATGATCCGTTCTCTCGAGCAGCAGACGCCCAACCGTGCCC	600						
Db	761543	TGGTGTCTGGTGGCCACCGCGATGATCCCTTTCTCTGGAGCAGCAGACGCCCAACCGTGCCC	761602						
QY	601	TGATGGCGGCCAACATGACAGCGCGGCGGTTCCGCTGTCTGGCAGCAGGAGCGCGCGCTGG	660						
Db	761603	TCATGGGGGCAACATGACAGCGCCACGCGGTGCGCTGTCTGTAGCAGGCGCGCGCTGG	761662						
QY	661	TGGCACCGGATGAGCTGCGCGCGCGATCGACGCGG	699						
Db	761663	TGGSCACCGGATGAGCTGCGCGCGCGATCGACGCGG	761701						

RESULT 4

US-08-313-185-57

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; Sequence 57, Application US/08313185
; Patent NO. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

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Query Match	79.2%	Score 558.2	DB 2	Length 3447
Best Local Similarity	87.4%	Pred. No. 1.1e-107		
Matches 611	Conservative 0	Mismatches 88	Indels 0	Gaps 0
Qy 1	CCGAGACGTCGGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGCGGG	60		
Db 1124	CCGAGACGTCGGAGGCGGATCACCGCGCAGACGCTGATCAATATCCGTCCCGTGTGTCGGC	1183		
Qy 61	CGATCAAGGAGTTCCTTCGGCACCAGCCAGCTGTCCCAAGTTCATGGACCGAACAACCCGC	120		
Db 1184	CTATCAAGGAATCTTCCTCGGCACCGACAGCTGTGCGAGTTTCATGGATCAGACAACCCCTC	1243		
Qy 121	TGTCGGGGCTCACCCACAAAGCGCGGCTGTGCGGGCTGTGGCGCGGGTGTCTGTCTCCGGG	180		
Db 1244	TGTGCGGGCTTGACCCACAAAGCGCGGCTGTGCGGGCTGTGGCGCGGGTGTGTTGTGCGGGT	1303		
Qy 181	AGCGGCGCGGGCTGGAGGTCCGCGAGCTGCACCCGTCCCACTACGGCCGGATGTGCCGA	240		
Db 1304	AGCGTCGGGGCTAGAGGTCCGTGAGCTGCACCCCTTCGCACCTACGGCCGGATGTGCCCGA	1363		
Qy 241	TCGAGACCCCGGAGGGTCCCAACATCCGCTCTGATCGGCTCGCTGTCTGATCGCGGGG	300		
Db 1364	TCGAGACTCGGAGGGCCCGGAACATAGTCTGATCGGTTCATTCTCGTGTACGCGCGGG	1423		
Qy 301	TCAACCCGTCCTGGGTTTCATCGAGACGCCGTATCCGAAGCGTGTGTCGACGGCGTGGTCAACG	360		
Db 1424	TCAACCCCTTCGCGTTTCATCGAAACACCGTACCGCAAGTGGTTGACCGTGTGTGTGTCAGCG	1483		

RESULT 4  
US-08-313-185-57



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; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muehling, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-0361
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

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Query Match 76.7%; Score 540.4; DB 1; Length 970;  
 Best Local Similarity 91.1%; Pred. No. 5e-104;  
 Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTCGCGG 60
DB 341 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCGTCGTCGCGG 400
QY 61 CGATCAAGAGGTTCTTTCGGCACCAGCAGCTGCCAGTTTCATGACCAAGAAACACCCG 120
DB 401 CGATCAAGAGGTTCTTTCGGCACCAGCAGCTGAGCCATTCATGACCAAGAAACACCCG 460
QY 121 TGTGGGGTTCACCAACAGCGCGCTGTGCGCGTGGCGCCGGTGTGTCTGTCCCGG 180
DB 461 TGTGGGGTTCACCAACAGCGCGCTGTGCGCGTGGCGCCGGTGTGTCTGTCCCGG 520
QY 181 AGCGGCGCGGCTGGAGGTCGCGGACGTCACCGTCCCACTACGCGCGGATGTCGCCGA 240
DB 521 AGCGTCCGCGCTGGAGGTCGCGGACGTCACCGTCCCACTACGCGCGGATGTCGCCGA 580
QY 241 TCAGAACCCCTGAGGGGCCAATCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 300
DB 581 TCAGAACCCCTGAGGGGCCAATCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 640
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGAAGTGTGTGACGCGGTGTGTCACCG 360
DB 641 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGAAGTGTGTGACGCGGTGTGTCACCG 700
QY 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTCGTCGTCGTCGTCGTCGTCGTCG 480
DB 761 CGCGGATCGATGCGGACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 820
QY 481 GCGAGTTCGAGTACGTGCCCTTCGTCGAGTGGATTCATGACGTCGTCGTCGTCGTCGTCGTCG 540
DB 821 GCGAGTTCGAGTACGTGCCCTTCGTCGAGTGGATTCATGACGTCGTCGTCGTCGTCGTCGTCG 880
QY 541 TGTGTGCGTGGCGACCGGATGATCCGTTCTTCGAGACGACGACGACGACGACGACGACGACG 600
DB 881 TGTGTGCGTGGCGACCGGATGATCCGTTCTTCGAGACGACGACGACGACGACGACGACGACG 940
QY 601 TGATGGGCGCAACATGACGCGCGACGCGG 630
DB 941 TCATGGGCGCAACATGACGCGCGACGCGG 970

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RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105WO1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-0361
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1

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Query Match 76.7%; Score 540.4; DB 5; Length 970;  
 Best Local Similarity 91.1%; Pred. No. 5e-104;  
 Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTCGCGG 60
DB 341 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCGTCGTCGCGG 400
QY 61 CGATCAAGAGGTTCTTTCGGCACCAGCAGCTGTCCAGTTTCATGACCAAGAAACACCCG 120
DB 401 CGATCAAGAGGTTCTTTCGGCACCAGCAGCTGAGCCATTCATGACCAAGAAACACCCG 460
QY 121 TGTGGGGTTCACCAACAGCGCGCTGTGCGCGTGGCGCCGGTGTGTCTGTCCCGG 180
DB 461 TGTGGGGTTCACCAACAGCGCGCTGTGCGCGTGGCGCCGGTGTGTCTGTCCCGG 520
QY 181 AGCGGCGCGGCTGGAGGTCGCGGACGTCACCGTCCCACTACGCGCGGATGTCGCCGA 240
DB 521 AGCGTCCGCGCTGGAGGTCGCGGACGTCACCGTCCCACTACGCGCGGATGTCGCCGA 580
QY 241 TCAGAACCCCTGAGGGGCCAATCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 300
DB 581 TCAGAACCCCTGAGGGGCCAATCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 640
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGAAGTGTGTGACGCGGTGTGTCACCG 360
DB 641 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGAAGTGTGTGACGCGGTGTGTCACCG 700
QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACGTCGTCGTCGTCGTCGTCGTCG 420

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Db 701 ACAGATGCTGTACTGACCGCGCAGAGAGGACCGCACCGTGTGGCACAAGGCAATT 760  
 Qy 421 CGCCGATCAGACAAAGGCGCGGTTCGCGAGGCGCGGTGTGTCGCGCGCGCAAGGCGG 480  
 Db 761 CGCCGATCGATGGGAGGTGCTTCGTGAGCGCGCGGTGTGTCGCGCGCGCAAGGCGG 820  
 Qy 481 GCGAGTCCAGTACGTCGTCCTCGTCGAGGTGACTACATGACGTCGTCGCGCGCAGA 540  
 Db 821 GCGAGTGGAGTACGTCGTCCTCGTCGAGGTGACTACATGACGTCGTCGCGCGCAGA 880  
 Qy 541 TGGTGTGCTGGCCCGCGATGATCCCTTCCTCGAGCAGCAGCAGCAGCAGCAGCAGC 600  
 Db 881 TGGTGTGCTGGCCCGCGATGATTCCTTCCTGAGCAGCAGCAGCAGCAGCAGCAGC 940  
 Qy 601 TGATGGCGCCCAACATGACGCGCGAGCGG 630  
 Db 941 TCATGGGGCAACATGACGCGCGAGCGG 970

RESULT 8

US-08-757-653-135  
 ; Sequence 135, Application US/08757653  
 ; Patent No. 5843669  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Kaiser, Michael W.  
 ; APPLICANT: Lyamichev, Victor I.  
 ; APPLICANT: Lyamichev, Natasha  
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
 ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
 ; NUMBER OF SEQUENCES: 190  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Medlen & Carroll, LLP  
 ; STREET: 220 Montgomery Street, Suite 2200  
 ; CITY: San Francisco  
 ; STATE: California  
 ; COUNTRY: United States Of America  
 ; ZIP: 94104  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/757,653  
 ; FILING DATE:  
 ; CLASSIFICATION: 435  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Ingolia, Diane E.  
 ; REGISTRATION NUMBER: 40,027  
 ; REFERENCE/DOCKET NUMBER: FORS-02565  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (415) 705-8410  
 ; TELEFAX: (415) 397-8338  
 ; INFORMATION FOR SEQ ID NO: 135:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 620 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: double  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: DNA (genomic)  
 ; US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;  
 Best Local Similarity 91.0%; Pred. No. 5.8e-102;  
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
 Qy 36 ATCAACATCCGTCAGTCTGGCGCGATCAAGAGTCTTCGGCACCGACCGAGTGTCC 95  
 Db 1 ATCAACATCCGCGCGGTGTGTCGCGCGATCAAGAGTCTTCGGCACCGACCGAGTGTCC 60  
 Qy 96 CAGTTTCATGACACAGAACACCGCTGTGGGGCTCACCCACAGGCGCGCTGTGGCG 155  
 Db 61 CAATTTCATGACACAGAACACCGCTGTGGGGCTTGACCCACAGGCGCGAGTGTGGCG 120

Qy 156 CTGGGCGCGGTGTGTCTTCCCGGAGCGGGCCGGGCTGGAGGTCCGGACGTGACACCG 215  
 Db 121 CTGGGCGCGGTGTGTCTTCTGTCAGCTGAGCGTGTGCGGGCTGGAGTCCGCGACGTGACACCG 180  
 Qy 216 TCCCTACGAGCGCGATGTGCGCGATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275  
 Db 181 TCGCTACGAGCGCGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
 Qy 276 GGTCTGCTGTGCTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACGCGTACGCG 335  
 Db 241 GGTCTGCTGTGCTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACGCG 300  
 Qy 336 AAGTGTGTGCTGACGCGGTGTCAACCGACGAGATCCACTACCTGACCGCGCGACGAGGAGAC 395  
 Db 301 AAGTGTGTGCTGACGCGGTGTGACGACGAGATCGTGTACCTGACCGCGCGAGGAGAC 360  
 Qy 396 CGCCACGTGTGTGCGCAGCGCAACTCGCGGATCGACGACGAGGGCGGTTCCGCGAGGCC 455  
 Db 361 CGCCACGTGTGTGCGCAGCGCAACTCGCGGATCGATCGATGCGGACGCTTCGTCGAGCGG 420  
 Qy 456 CGGGTGTGTGCTCGCGCGCAAGCGCGGCGAGGTTCGAGTACGTCGCCCTCGTCCGAGGTGGAC 515  
 Db 421 CGGGTGTGTGCTCGCGCGCAAGCGCGGCGAGGTTCGAGTACGTCGCCCTCGTCCGAGGTGGAC 480  
 Qy 516 TACATGAGACGTGTGCGCGCGCAGATGCTGTGGTGGCCACCGCGATGATCCCGTTCCTC 575  
 Db 481 TACATGAGACGTGTGCGCGCGCAGATGCTGTGGTGGCCACCGCGATGATCCCGTTCCTC 540  
 Qy 576 GAGCAGCAGCAGCGCAACCGTGTGCTGATGGCGCGCAACATGACGCGCGAGCGGTTCGG 635  
 Db 541 GAGCAGCAGCAGCGCAACCGTGTGCTGATGGCGCGCAACATGACGCGCGAGCGGTTCGG 600  
 Qy 636 CTGTGTGCGCAGCGAGCGGCC 655  
 Db 601 CTGTGTGCGTGTGAGCGAGCGGCC 620

RESULT 9

US-08-757-653-138/c  
 ; Sequence 138, Application US/08757653  
 ; Patent No. 5843669  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Kaiser, Michael W.  
 ; APPLICANT: Lyamichev, Victor I.  
 ; APPLICANT: Lyamichev, Natasha  
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
 ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
 ; NUMBER OF SEQUENCES: 190  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Medlen & Carroll, LLP  
 ; STREET: 220 Montgomery Street, Suite 2200  
 ; CITY: San Francisco  
 ; STATE: California  
 ; COUNTRY: United States Of America  
 ; ZIP: 94104  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/757,653  
 ; FILING DATE:  
 ; CLASSIFICATION: 435  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Ingolia, Diane E.  
 ; REGISTRATION NUMBER: 40,027  
 ; REFERENCE/DOCKET NUMBER: FORS-02565  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (415) 705-8410  
 ; TELEFAX: (415) 397-8338  
 ; INFORMATION FOR SEQ ID NO: 138:



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; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGGCGGATCAAGAGTTCTTCGGCACCCAGCTGTCC 95
DB 620 ATCAACATCCGCGGTGTCGGCGGATCAAGAGTTCTTCGGCACCCAGCTGTAGC 561
QY 96 CAGTTTCATGACACAGAACACCCGCTGTCCGGGCTCACCCACAGCGCCCTGTCCGGC 155
DB 560 CAATTCATGACACAGAACACCCGCTGTCCGGGTTGACCCACAGCGCGACTGTCCGGC 501
QY 156 CTGGGCCCGGTGTCGTCGGGAGCGCGGCTGAGGTCCGCGAGCTGCACCCG 215
DB 500 CTGGGCCCGCGGTGTCGTCAGTGAAGCGTCCGGGCTGAGGTCCGCGAGCTGCACCCG 441
QY 216 TCCCACTATACGCGCGATGCCCGATCGAGACCCCGAGGCTCCCAACATCGGTCTGATC 275
DB 440 TCGCACTATACGCGCGATGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381
QY 276 GGCTCGCTGTGCGGTATGCGCGGGTCAACCCGTTCCGGTTTCATCGAGACCGCGTACC 335
DB 380 GGCTCGCTGTGCGGTATGCGCGGGTCAACCCGTTCCGGTTTCATCGAAACCGCGTACC 321
QY 336 AAGGTGTCAGCGCGGTGTCACCGAGATCCACTCTGACCGCGCGAGGAGGAC 395
DB 320 AAGGTGTCAGCGCGGTGTCACCGAGATCCACTCTGACCGCGCGAGGAGGAC 261
QY 396 CGCCAGTGTGCGCGAGGCGCACTCGCGATCGAGACAGGCGGTTCCGGAGGCC 455
DB 260 CGCCAGTGTGCGCGAGGCGCAATTCGCGATCGATCGCGAGCGGTTCGTCGAGCGCG 201
QY 456 CGGGTGTGTCGCGCGCGAGGCGGAGTTCGAGTTCGTCGTCGTCGCGAGGTGGAC 515
DB 200 CGGGTGTGTCGCGCGCGAGGCGGAGTTCGAGTTCGTCGTCGTCGTCGAGGTGGAC 141
QY 516 TACATGAGCTGTGCGCGCGAGATGTTGTCGGTGGCCACCGCGATGATCCCGTTCCCT 575
DB 140 TACATGAGCTGTGCGCGCGAGATGTTGTCGGTGGCCACCGCGATGATTCCTCTCTG 81
QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
DB 80 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 21

QY 636 CTGGTCCGTCAGCGAGCGCC 655
DB 20 CTGGTCCGTCAGCGAGCGCC 1
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RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 637424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

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; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match          75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGGCGGATCAAGAGTTCTTCGGCACCCAGCTGTCC 95
DB 1 ATCAACATCCGCGGTGTCGGCGGATCAAGAGTTCTTCGGCACCCAGCTGTAGC 60
QY 96 CAGTTTCATGACACAGAACACCCGCTGTCCGGGCTCACCCACAGCGCCCTGTCCGGC 155
DB 61 CAATTCATGACACAGAACACCCGCTGTCCGGGTTGACCCACAGCGCGACTGTCCGGC 120
QY 156 CTGGGCCCGGTGTCGTCGGGAGCGCGGCTGAGGTCCGCGACGTCGACCCG 215
DB 121 CTGGGCCCGCGGTGTCGTCAGTGAAGCGTCCGGGCTGAGGTCCGCGACGTCACCCG 180
QY 216 TCCCACTATGCGCGATGTCGGCGATCGAGACCCCGAGGTTCCCAACATCGGTCTGATC 275
DB 181 TCCCACTATGCGCGATGTCGGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTGCGGTGTCGCGGGTCAACCCGTTCCGGTTTCATCGAGACCGCTACCCG 335
DB 241 GGCTCGCTGTGCGGTGTCGCGGGTCAACCCGTTCCGGTTTCATCGAAACCGCTACCCG 300
QY 336 AAGGTGTCAGCGCGGTGTCACCGAGATCCACTCTGACCGCGCGAGGAGGAC 395
DB 301 AAGGTGTCAGCGCGGTGTTAGCGACGAGATCGTGTACTGACCGCGCGAGGAGGAC 360
QY 396 CGCCAGTGTGCGCGAGCGCACTCGCGATCGAGACAGGCGCGGTTCGCGAGGCC 455
DB 361 CGCCAGTGTGCGCAGCGCAATTCGCGGATCGATGCGGAGCGGTTCGTCGAGCGCG 420
QY 456 CGGGTGTGTCGCGCGCAAGCGCGGAGGTTCGAGTTCGTCGTCGTCGCGAGGTGGAC 515
DB 421 CGGGTGTGTCGCGCGCAAGCGCGGAGGTTCGAGTTCGTCGTCGTCGTCGAGGTGGAC 480
QY 516 TACATGAGCTGTGCGCGCGCAGATGTTGTCGGTGGCCACCGCGATGATTCGGTTCCCT 575
DB 481 TACATGAGCTGTGCGCGCGCAGATGTTGTCGGTGGCCACCGCGATGATTCCTCTCTG 540
QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
DB 541 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
QY 636 CTGGTCCGTCAGCGAGCGCC 655
DB 1 CTGGTCCGTCAGCGAGCGCC 1
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Db 601 CTGGTCCGTAGCGAGGCCCC 620
RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138
Query Match 75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
QY 36 ATCAACATCCGTCCTGCTGGCGGCGATCAAGGAGTTCTTCGGCACACGAGCTGTCC 95
Db 620 ATCAACATCCGCGGTGGTGGCGGCGATCAAGGAGTTCTTCGGCACACGAGCTGTGAGC 561
QY 96 CAGTTTCATGGACAGCAACCCGCTGTGGGGCTCACCCACAAGCGCGCTGTGGCG 155
Db 560 CAATTTCATGACAGCAACCCGCTGTGGGGTTGACCCACAAGCGCGACTGTGGCG 501
QY 156 CTGGGCGCGGGTGTCTGTCCGGGAGCGGGCGGGCTGGAGTCCGGACGTGACCCG 215
Db 500 CTGGGCGCGGGCGGTCTGTACGTGAGCGTGGCGGGCTGGAGTCCGGACGTGACCCG 441
QY 216 TCCTACTAGCGCGGATGTCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 440 TCGACTAGCGCGGATGTCGGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381
QY 276 GGCTCGCTGTGGTGTATGCGGGGTCAACCCGTTTCGGGTTCATCGAGACGCGGTACCGC 335
Db 380 GGCTCGCTGTGGTGTATGCGGGGTCAACCCGTTTCGGGTTCATCGAAACGCGGTACCGC 321
QY 336 AAGGTGGTGCAGCGCGTGGTTCACCGACGAGATCACTACTGACCCCGACGAGGAGGAC 395
Db 320 AAGGTGGTGCAGCGCGTGGTTCACCGACGAGATCGTGTACTGTGACCCCGACGAGGAGGAC 261
QY 396 CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGGCCGTTTCGCGAGGCC 455
Db 260 CGCCACGTGGTGGCACAGGCCAAATTCGCGCATCGATCGGACGGTTCGTCGAGCG 201
QY 456 CGGTGCTGGTCCCGCCGCAAGCGGGCGAGTTCAGTAGCTGCTCTCGAGGTGGAC 515
Db 200 CGGTGCTGGTCCCGCCGCAAGCGGGCGAGTTCAGTAGCTGCTCTCGAGGTGGAC 141
QY 516 TACATGGACGTGTGCGCGCGCAGATGTGTCGGTGGCCACGCGCATGATCCGTTCTTC 575
Db 140 TACATGGACGTGTGCGCGCGCAGATGTGTCGGTGGCCACGCGCATGATCCCTTCCTG 81
QY 576 GAGCACGACGACGCCAACCGTGCCTGATGGCGCGCAACATGACGCGCAGCGGTTCG 635
Db 80 GAGCACGACGACGCCAACCGTGCCTCATGGGCGCAACATGACGCGCAGCGGTTCG 21
QY 636 CTGGTGGCAGCGAGCGGCC 655
Db 20 CTGGTCCGTAGCGAGGCCCC 1
RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; FILING DATE:
; CLASSIFICATION:
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135
Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
QY 36 ATCAACATCCGTCCTGCTGGCGGCGATCAAGGAGTTCTTCGGCACACGAGCTGTCC 95
Db 1 ATCAACATCCGCGGTGGTGGCGGCGATCAAGGAGTTCTTCGGCACACGAGCTGTGAGC 60
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QY 96 CAGTTTCATGACAGAAACACCGCTGTGCGGGCTACCCACAAGCGCCCTGTGCGGG 155  
Db 61 CAATTTCATGACAGAAACACCGCTGTGCGGGTGTGACCCACAAGCGCCACTGTGCGGG 120  
QY 156 CTGGGCGCGGGTGTCTGTCTCCGGAGCGCGGCTGGAGGTCCGCGACGTGCAACCG 215  
Db 121 CTGGGCGCGGGTGTCTGTCTCCGGAGCGGTGCGGGCTGGAGGTCCGCGACGTGCAACCG 180  
QY 216 TCCCACTACGGCGGGATGTCGCGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGGCGGGATGTCGCGATCGAGACCCCTGAGGGGCGCAACATCGGTCTGATC 240  
QY 276 GGCTCGCTGTGCGGTATGCGGGTCAACCGCTTGGGTTTCATCGAGCGCGGTACCGC 335  
Db 241 GGCTCGCTGTGCGGTATGCGGGTCAACCGCTTGGGTTTCATCGAGACCGCGTACCGC 300  
QY 336 AAGGTGTGTGACCGCGGTGTGCGCGAGATCCACTTACCTGACCGCGCGAGGAGGAC 395  
Db 301 AAGGTGTGTGACCGCGGTGTGCGCGAGATCCACTTACCTGACCGCGCGAGGAGGAC 360  
QY 396 CGCACGTGTGCGCGAGGCAACTCGCCGATCGAGACAAAGGCGCGGTTCGCGGAGGC 455  
Db 361 CGCACGTGTGCGCGAGGCAACTCGCCGATCGAGACAAAGGCGCGGTTCGCGGAGGC 420  
QY 456 CGGGTGTGTGCGCGCGAGGCGCGAGGTGAGTACGTGCGCTCGTCTGAGGTGGAC 515  
Db 421 CGGGTGTGTGCGCGCGAGGCGCGAGGTGAGTACGTGCGCTCGTCTGAGGTGGAC 480  
QY 516 TACATGACGTGTGCGCGCGAGGCGCGAGGTGAGTACGTGCGCTCGTCTGAGGTGGAC 575  
Db 481 TACATGACGTGTGCGCGCGAGGCGCGAGGTGAGTACGTGCGCTCGTCTGAGGTGGAC 540  
QY 576 GAGCAGACGACGCCAACCGTGCCTGAGGGCGCCAAACATGACGCGCGAGGCGGTCCG 635  
Db 541 GAGCAGACGACGCCAACCGTGCCTGAGGGCGCCAAACATGACGCGCGAGGCGGTCCG 600  
QY 636 CTGGTGGCAGCGAGGGCC 655  
Db 601 CTGGTGGCAGCGAGGGCC 620

## RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; OLIVE, DAVID M.

; LYAMICHEV, VICTOR I.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN &amp; CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: &lt;Unknown&gt;

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:  
US-09-655-378A-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 5.9e-102;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCAGTCTGTGCGGGGATCAAGAGAGTTCTTCGGGACACGACGAGCTGTCC 95  
Db 620 ATCAACATCCGTCCAGTCTGTGCGGGGATCAAGAGAGTTCTTCGGGACACGACGAGCTGTCC 561  
QY 96 CAGTTTCATGACAGAAACACCGCTGTGCGGGCTCACCCACAAGCGCCCTGTGCGGG 155  
Db 560 CAAATTTCATGACAGAAACACCGCTGTGCGGGTTGACCCACAAGCGCGACTGTGCGGG 501  
QY 156 CTGGGCGCGGGTGTCTGTCTCCGGGAGCGGGCGGGCTGGAGGTCCGCGACGTGCAACCG 215  
Db 500 CTGGGCGCGGGTGTCTGTCTCCGGGAGCGGGCGGGCTGGAGGTCCGCGACGTGCAACCG 441  
QY 216 TCCCACTACGGCGGGATGTCGCGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 275  
Db 440 TCGCACTACGGCGGGATGTCGCGATCGAGACCCCTGAGGGGCGCAACATCGGTCTGATC 381  
QY 276 GGCTCGCTGTGCGGTATGCGCGGGTCAACCGCTTCCGGGTTTCATCGAGACGCGGTACCGC 335  
Db 380 GGCTCGCTGTGCGGTATGCGCGGGTCAACCGCTTCCGGGTTTCATCGAGACGCGGTACCGC 321  
QY 336 AAGGTGTGTGACCGCGGTGTCTACCGAGAGATCCACTTACCTGACCGCGCGAGGAGGAC 395  
Db 320 AAGGTGTGTGACCGCGGTGTCTACCGAGAGATCCACTTACCTGACCGCGCGAGGAGGAC 261  
QY 396 CGCACGTGTGCGCGAGGCAACTCGCCGATCGAGACAAAGGCGCGGTTCGCGGAGGC 455  
Db 260 CGCACGTGTGCGCGAGGCAACTCGCCGATCGAGACAAAGGCGCGGTTCGCGGAGGC 201  
QY 456 CGGGTGTGTGCGCGAGGCGCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAC 515  
Db 200 CGGGTGTGTGCGCGAGGCGCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAC 141  
QY 516 TACATGACGTGTGCGCGCGAGATGTTGTTGCGGTGGCCACCGCGATGATCCGTTCTTC 575  
Db 140 TACATGACGTGTGCGCGCGAGATGTTGTTGCGGTGGCCACCGCGATGATTCCTTCTCTG 81  
QY 576 GAGCAGACGACGCCAACCGTGCCTGATGGGGCGCAACATGACGCGCGAGGCGGTCCG 635  
Db 80 GAGCAGACGACGCCAACCGTGCCTGATGGGGCGCAACATGACGCGCGAGGCGGTCCG 21  
QY 636 CTGGTGGCAGCGAGGGCC 655  
Db 20 CTGGTGGCAGCGAGGGCC 1

## RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

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CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCCGCGGATCAAGAGGTTCTTCGGACACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGGTTCTTCGGACACAGCCAGCTGAGC 60
QY 96 CAGTTTCATGGACAGAACACCCGCTGTCCGGGCTCACCCACAGCGCGCTGTGCGG 155
DB 61 CAATTTCATGGACAGAACACCCGCTGTCCGGGCTGTGAGGTTCTTCGGACACAGCCAGCTGTGCGG 120
QY 156 CTGGGCGCGGTGTGCTGTCCGGGAGCGGGCTGGAGGTTCCGAGAGTGCACCG 215
DB 121 CTGGGCGCGGTGTGCTGTCCGGGAGCGGGCTGGAGGTTCCGAGAGTGCACCG 180
QY 216 TCCCACTACGCGGATGTCCCGATCGAGACCCCGAGGTTCCCAACATCGGTCTGATC 275
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QY 396 CGCCAGTGTGTGCGGACGCGCAACTCGCGATCGACGACAAAGGGCGGTTCGCGGAGGCC 455
DB 361 CGCCAGTGTGTGACAGAGCCAAATTCGCCGATCGATCGGACGCTTCGTCGAGCGC 420
QY 456 CGGTGTCTGCTCGCGCGCAAGCGCGGAGGTGTGAGTACGTGCCCTTCGTCGAGGTGAC 515
DB 421 CGGTGTCTGCTCGCGCGCAAGCGCGGAGGTGTGAGTACGTGCCCTTCGTCGAGGTGAC 480
QY 516 TACATGAGCTGTCCGCGCGCAGATGTGTGCTGGTGGCCACCGCATGATCCGTTCTTC 575
DB 481 TACATGAGCTGTCCGCGCGCAGATGTGTGCTGGTGGCCACCGCATGATCCGTTCTTC 540
QY 576 GAGCAGCAGAGCCAAACCGTGTCCCTGTATGGGGCGCCAAACATGACGAGCGCGGTTCCG 635

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DB 541 GAGCAGCAGAGCCAAACCGTGTCCCTCATGGGGCAACATGACGAGCGCGGTGCCG 600
QY 636 CTGTGCGCAGCGAGCGCC 655
DB 601 CTGGTCCGTAGCGAGGCC 620

RESULT 15
US-08-757-653-137
Sequence 137, Application US/08757653
Patent No. 5843669
GENERAL INFORMATION:
APPLICANT: Kaiser, Michael W.
APPLICANT: Lyamichev, Natasha I.
APPLICANT: Lyamichev, Natasha I.
TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
NUMBER OF SEQUENCES: 190
CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCCGCGGATCAAGAGGTTCTTCGGACACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGGTTCTTCGGACACAGCCAGCTGAGC 60
QY 96 CAGTTTCATGGACAGAACACCCGCTGTCCGGGCTCACCCACAGCGCGCTGTGCGG 155
DB 61 CAATTTCATGGACAGAACACCCGCTGTCCGGGCTGTGAGGTTCTTCGGACACAGCCAGCTGTGCGG 120
QY 156 CTGGGCGCGGTGTGCTGTCCGGGAGCGGGCTGGAGGTTCCGAGAGTGCACCG 215
DB 121 CTGGGCGCGGTGTGCTGTCCGGGAGCGGGCTGGAGGTTCCGAGAGTGCACCG 180
QY 216 TCCCACTACGCGGATGTCCCGATCGAGACCCCGAGGTTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
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Qy	396	CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGGCGGTTTCGCGGAGGCC	455
Db	361	CGCCACGTGGTGGCACAGGCCAAATTCGCCGATCGATCGGACCGTTCGTTTCGAGCCG	420
Qy	456	CGGTTGCTGGTCCGCGCGCAAGCGCGCGAGTCCAGTACGTGCCCCCTCGTCCGAGGTGGAC	515
Db	421	CGCGTGTGCTCCGCGCGCAAGCGCGCGAGTGGAGTACGTGCCCCCTCGTCTCTGAGGTGGAC	480
Qy	516	TACATGACGTGTGCGCGCGCCAGATGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTC	575
Db	481	TACATGACGTCTCGCCCCCGCCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCCTG	540
Qy	576	GAGCAGCAGCAGCCCAACCGTGCCTGATGGGCGCCAAATGCGAGCGCCAGGCGGTTCCG	635
Db	541	GAGCAGCAGCAGCCCAACCGTGCCTCATGGGGGCAAAATGCGAGCGCCAGGCGGTTCCG	600
Qy	636	CTGGTGGCAGCGAGGCGCC	655
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Job time : 114.459 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model  
Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds  
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Perfect score: 705  
Sequence: 1 ccagagcgtgaggcgatc.....ggcgatcgacggcgagcgt 705

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 3271544945 residues

Total number of hits satisfying chosen parameters: 14663426

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Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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25: /cgn2\_6/ptodata/1/pubpna/US60\_NEW\_PUB.seq:  
26: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	705	9	US-09-285-306-4
2	705	100.0	705	9	US-09-285-306-5
3	705	100.0	705	9	US-09-285-306-6
4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-12

8	705	100.0	705	9	US-09-285-306-13	Sequence 13, Appl
9	705	100.0	705	9	US-09-285-306-14	Sequence 14, Appl
10	705	100.0	705	9	US-09-285-306-16	Sequence 16, Appl
11	705	100.0	705	9	US-09-285-306-24	Sequence 24, Appl
12	703.4	99.8	705	9	US-09-285-306-17	Sequence 17, Appl
13	695	98.6	705	9	US-09-285-306-3	Sequence 3, Appl
14	693.4	98.4	705	9	US-09-285-306-11	Sequence 11, Appl
15	691	98.0	705	9	US-09-285-306-10	Sequence 10, Appl
16	691	98.0	3444	17	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appl
18	687	97.4	687	9	US-09-285-306-19	Sequence 19, Appl
19	687	97.4	687	9	US-09-285-306-20	Sequence 20, Appl
20	687	97.4	687	9	US-09-285-306-21	Sequence 21, Appl
21	687	97.4	687	9	US-09-285-306-22	Sequence 22, Appl
22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appl
23	687	97.4	687	9	US-09-285-306-25	Sequence 25, Appl
24	687	97.4	687	9	US-09-285-306-27	Sequence 27, Appl
25	660.2	93.6	705	9	US-09-285-306-143	Sequence 143, App
26	658.6	93.4	705	9	US-09-285-306-144	Sequence 144, App
27	655.4	93.0	705	9	US-09-285-306-87	Sequence 87, Appl
28	655.4	93.0	705	9	US-09-285-306-88	Sequence 88, Appl
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30	655.4	93.0	705	9	US-09-285-306-92	Sequence 92, Appl
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32	653.8	92.7	705	9	US-09-285-306-84	Sequence 84, Appl
33	653.8	92.7	705	9	US-09-285-306-86	Sequence 86, Appl
34	653.8	92.7	705	9	US-09-285-306-93	Sequence 93, Appl
35	653.8	92.7	705	9	US-09-285-306-94	Sequence 94, Appl
36	653.8	92.7	705	9	US-09-285-306-95	Sequence 95, Appl
37	652.2	92.5	705	9	US-09-285-306-85	Sequence 85, Appl
38	652.2	92.5	705	9	US-09-285-306-89	Sequence 89, Appl
39	652.2	92.5	705	9	US-09-285-306-91	Sequence 91, Appl
40	652.2	92.5	705	9	US-09-285-306-146	Sequence 146, App
41	642.2	91.1	687	9	US-09-285-306-148	Sequence 148, App
42	642.2	91.1	687	9	US-09-285-306-100	Sequence 100, App
43	637.4	90.4	687	9	US-09-285-306-99	Sequence 99, Appl
44	635.8	90.2	687	9	US-09-285-306-145	Sequence 145, App
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## ALIGNMENTS

RESULT 1  
US-09-285-306-4  
; Sequence 4, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gengeras, Thomas  
; APPLICANT: Drenkow, Jory  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 4  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-4

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156; Indels 0; Gaps 0;  
Matches 705; Conservative 0; Mismatches 0;  
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DB 1 CCCAGGACGTGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGCGG 60

QY 61 CGATCAAGAGTTCTTTTCGGACACAGCCAGCTGTCACAGTTTCATGGACCAAGAAACACCCCG 120  
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Db |||||  
181 AGCGGCCCGGGTTCGAGGTCGCGAGCTGCACCCGTCACCTACCGCCGATGTGCCGA 240  
QY 241 TCAGACCCCGAGGTCACCAATCGGTCATCGGTCGATCGGTCGATCGGTCGATCGGTCGATCGGTCG 300  
Db |||||  
241 TCAGACCCCGAGGTCACCAATCGGTCATCGGTCGATCGGTCGATCGGTCGATCGGTCGATCGGTCG 300  
QY 301 TCACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGTCGAGCGGTCGTCACCG 360  
Db |||||  
301 TCACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGTCGAGCGGTCGTCACCG 360  
QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTCGTCGCGCGAGGCCAACT 420  
Db |||||  
361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTCGTCGCGCGAGGCCAACT 420  
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGCGTTCGCGAGGCGCGTTCGCGAGGCGCG 480  
Db |||||  
421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGCGTTCGCGAGGCGCGTTCGCGAGGCGCG 480  
QY 481 GCGAGTCGAGTACGTCGCTTCGTCGAGGTCGATACATGACGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
Db |||||  
481 GCGAGTCGAGTACGTCGCTTCGTCGAGGTCGATACATGACGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
QY 541 TGTGTCG 600  
Db |||||  
541 TGTGTCG 600  
QY 601 TGATGGCGCCAACTGACGCGCAGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660  
Db |||||  
601 TGATGGCGCCAACTGACGCGCAGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660  
QY 661 TGGGACCCGTCATGGAGTCGCGCGCGCATCGACCGCGGCGT 705  
Db |||||  
661 TGGGACCCGTCATGGAGTCGCGCGCGCATCGACCGCGGCGT 705

RESULT 2  
US-09-285-306-5  
; Sequence 5, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 5  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-5  
  
Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 CCCAGACGTGGAGGCGATCACACCGCAGCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
|||

Db 1 CCCAGACGTGGAGGCGATCACACCGCAGCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
QY |||||  
61 CGATCAAGAGTTCTTTTCGGACACAGCCAGCTGTCACAGTTTCATGGACCAAGAAACACCCCG 120  
Db |||||  
61 CGATCAAGAGTTCTTTTCGGACACAGCCAGCTGTCACAGTTTCATGGACCAAGAAACACCCCG 120  
QY 121 TGTTCGGGGTCAACCAAGCCGCTGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCG 180  
Db |||||  
121 TGTTCGGGGTCAACCAAGCCGCTGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCG 180  
QY 181 AGCGGCCCGGGTTCGAGGTCGCGAGCTGCACCCGTCACCTACCGCCGATGTGCCGA 240  
Db |||||  
181 AGCGGCCCGGGTTCGAGGTCGCGAGCTGCACCCGTCACCTACCGCCGATGTGCCGA 240  
QY 241 TCAGACCCCGAGGTCACCAATCGGTCATCGGTCGATCGGTCGATCGGTCGATCGGTCGATCGGTCG 300  
Db |||||  
241 TCAGACCCCGAGGTCACCAATCGGTCATCGGTCGATCGGTCGATCGGTCGATCGGTCGATCGGTCG 300  
QY 301 TCACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGTCGAGCGGTCGTCACCG 360  
Db |||||  
301 TCACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGTCGAGCGGTCGTCACCG 360  
QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTCGTCGCGCGAGGCCAACT 420  
Db |||||  
361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTCGTCGCGCGAGGCCAACT 420  
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGCGTTCGCGAGGCGCGTTCGCGAGGCGCG 480  
Db |||||  
421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGCGTTCGCGAGGCGCGTTCGCGAGGCGCG 480  
QY 481 GCGAGTCGAGTACGTCGCTTCGTCGAGGTCGATACATGACGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
Db |||||  
481 GCGAGTCGAGTACGTCGCTTCGTCGAGGTCGATACATGACGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
QY 541 TGTGTCG 600  
Db |||||  
541 TGTGTCG 600  
QY 601 TGATGGCGCCAACTGACGCGCAGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660  
Db |||||  
601 TGATGGCGCCAACTGACGCGCAGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660  
QY 661 TGGGACCCGTCATGGAGTCGCGCGCGCATCGACCGCGGCGT 705  
Db |||||  
661 TGGGACCCGTCATGGAGTCGCGCGCGCATCGACCGCGGCGT 705

RESULT 3  
US-09-285-306-6  
; Sequence 6, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 6  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-6  
  
Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



```

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
|
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
|
QY 61 CGATCAAGGAGTTCTTCCGACACAGCAGCTGTCCAGTTCATGGACCAAGAAACACCCCGC 120
|
Db 61 CGATCAAGGAGTTCTTCCGACACAGCAGCTGTCCAGTTCATGGACCAAGAAACACCCCGC 120
|
QY 121 TGTCCGGGCTCACCCACAGGCGGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
|
Db 121 TGTCCGGGCTCACCCACAGGCGGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
|
QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCCACTACGGCCGGATGTGCCCGA 240
|
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCCACTACGGCCGGATGTGCCCGA 240
|
QY 241 TCAGACCCCGGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCCGGG 300
|
Db 241 TCAGACCCCGGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCCGGG 300
|
QY 301 TCAACCGGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTGGCGGTGGTCAACCG 360
|
Db 301 TCAACCGGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTGGCGGTGGTCAACCG 360
|
QY 361 ACAGATCCACTACCTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
|
Db 361 ACAGATCCACTACCTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
|
QY 421 CGCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGGTGTGGTCCGCGCAAGCGG 480
|
Db 421 CGCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGGTGTGGTCCGCGCAAGCGG 480
|
QY 481 GCGAGTTCAGTACGTCCCTCGTCCGAGGTGGACTACATGACAGTGTGGCGCGCCAGA 540
|
Db 481 GCGAGTTCAGTACGTCCCTCGTCCGAGGTGGACTACATGACAGTGTGGCGCGCCAGA 540
|
QY 541 TGTGTCCGTGGCGACCGATGATCCGTTCTCCGAGACGACGCGCGTGGTGGCGCGCGTGG 600
|
Db 541 TGTGTCCGTGGCGACCGATGATCCGTTCTCCGAGACGACGCGCGTGGTGGCGCGCGTGG 600
|
QY 601 TGATGGCGCCAAACATGACGCGCGGCGGTTCGGTGGTGGCGAGCGCGCGCGTGG 660
|
Db 601 TGATGGCGCCAAACATGACGCGCGGCGGTTCGGTGGTGGCGAGCGCGCGCGTGG 660
|
QY 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705
|
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705

```

RESULT 4

```

US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

```

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;

```

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
|
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
|
QY 61 CGATCAAGGAGTTCTTCCGACACAGCAGCTGTCCAGTTCATGGACCAAGAAACACCCCGC 120
|
Db 61 CGATCAAGGAGTTCTTCCGACACAGCAGCTGTCCAGTTCATGGACCAAGAAACACCCCGC 120
|
QY 121 TGTCCGGGCTCACCCACAGGCGGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
|
Db 121 TGTCCGGGCTCACCCACAGGCGGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
|
QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCCACTACGGCCGGATGTGCCCGA 240
|
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCCACTACGGCCGGATGTGCCCGA 240
|
QY 241 TCAGACCCCGGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCCGGG 300
|
Db 241 TCAGACCCCGGAGGTTCCAAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCCGGG 300
|
QY 301 TCAACCGGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTGGCGGTGGTCAACCG 360
|
Db 301 TCAACCGGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTGGCGGTGGTCAACCG 360
|
QY 361 ACAGATCCACTACCTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
|
Db 361 ACAGATCCACTACCTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
|
QY 421 CGCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGGTGTGGTCCGCGCAAGCGG 480
|
Db 421 CGCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGGTGTGGTCCGCGCAAGCGG 480
|
QY 481 GCGAGTTCAGTACGTCCCTCGTCCGAGGTGGACTACATGACAGTGTGGCGCGCCAGA 540
|
Db 481 GCGAGTTCAGTACGTCCCTCGTCCGAGGTGGACTACATGACAGTGTGGCGCGCCAGA 540
|
QY 541 TGTGTCCGTGGCGACCGATGATCCGTTCTCCGAGACGACGCGCGTGGTGGCGCGCGTGG 600
|
Db 541 TGTGTCCGTGGCGACCGATGATCCGTTCTCCGAGACGACGCGCGTGGTGGCGCGCGTGG 600
|
QY 601 TGATGGCGCCAAACATGACGCGCGGCGGTTCGGTGGTGGCGAGCGCGCGCGTGG 660
|
Db 601 TGATGGCGCCAAACATGACGCGCGGCGGTTCGGTGGTGGCGAGCGCGCGCGTGG 660
|
QY 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705
|
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705

```

RESULT 5

```

US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGACGTGGAGGCGATCACACGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAACAAACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAACAAACCCGC 120

QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGCGCTGCGGCGCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGCGCTGCGGCGCGGGTGTCTGTCCCGGG 180

QY 181 AGCGGGCCGGGTGGAGGTCGGGAGTGCACCCGTCCCACTACCGCCGGATGTCGCCGA 240
Db 181 AGCGGGCCGGGTGGAGGTCGGGAGTGCACCCGTCCCACTACCGCCGGATGTCGCCGA 240

QY 241 TCGAGACCCCGAGGGTCCAAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCAAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGGG 300

QY 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGAAGGTGCTCGACGGCGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGAAGGTGCTCGACGGCGTGGTCAACCG 360

QY 361 ACGNATCCACTACCTGACCGCGGAGGAGCGCCAGCTGTCGTCGGTGGCGAGGCGCACT 420
Db 361 ACGNATCCACTACCTGACCGCGGAGGAGCGCCAGCTGTCGTCGGTGGCGAGGCGCACT 420

QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTTGCTGCTCCGCGCAAGGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTTGCTGCTCCGCGCAAGGGCGG 480

QY 481 GCGAGTTCGAGTACGTCGCTCGAGGTGGAGTACATGACGCTGTCCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTCGAGGTGGAGTACATGACGCTGTCCGCGCGCCAGA 540

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGACGACGACGCGCAACCGTGCCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGCAGCAGCAGCGCAACCGTGCCC 600

QY 601 TGATGGGCGCCAAACATGACGCGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAACATGACGCGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660

QY 661 TGGGCACCGGCATGGAGCTGCGCGCGGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGGATCGACGCGCGGACGT 705
```

```
RESULT 6
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER APPLICATION NUMBER: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
```

```
US-09-285-306-9

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGACGTGGAGGCGATCACACGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAACAAACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAACAAACCCGC 120

QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGCGCTGCGGCGCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGCGCTGCGGCGCGGGTGTCTGTCCCGGG 180

QY 181 AGCGGGCCGGGTGGAGGTCGGGAGTGCACCCGTCCCACTACCGCCGGATGTCGCCGA 240
Db 181 AGCGGGCCGGGTGGAGGTCGGGAGTGCACCCGTCCCACTACCGCCGGATGTCGCCGA 240

QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGGG 300

QY 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGAAGGTGCTCGACGGCGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGAAGGTGCTCGACGGCGTGGTCAACCG 360

QY 361 ACGNATCCACTACCTGACCGCGGAGGAGCGCCAGCTGTCGTCGGTGGCGAGGCGCACT 420
Db 361 ACGNATCCACTACCTGACCGCGGAGGAGCGCCAGCTGTCGTCGGTGGCGAGGCGCACT 420

QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTTGCTGCTCCGCGCAAGGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTTGCTGCTCCGCGCAAGGGCGG 480

QY 481 GCGAGTTCGAGTACGTCGCTCGAGGTGGAGTACATGACGCTGTCCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTCGAGGTGGAGTACATGACGCTGTCCGCGCGCCAGA 540

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGACGACGACGCGCAACCGTGCCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGCAGCAGCAGCGCAACCGTGCCC 600

QY 601 TGATGGGCGCCAAACATGACGCGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAACATGACGCGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660

QY 661 TGGGCACCGGCATGGAGCTGCGCGCGGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGGATCGACGCGCGGACGT 705
```

```
RESULT 7
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER APPLICATION NUMBER: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
```

[illegible]

```

RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymatrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-SEQ for Windows Version 3.0

```

```

RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03

```

```

; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

```

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGGCACCGACGAGTCCAGTTCATGGACAGAACACCCGC 120
Db 61 CGATCAAGAGTTCTTTCGGCACCGACGAGTTCATGGACAGAACACCCGC 120
QY 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCCACATCGGTCGATCGGTCGCTCGGTGATGGCGGG 240
Db 181 AGCGGCGCGGCTGGAGGTCGCCACATCGGTCGATCGGTCGCTCGGTGATGGCGGG 240
QY 241 TCGAGACCCCGAGGTCGCCACATCGGTCGATCGGTCGCTCGGTGATGGCGGG 300
Db 241 TCGAGACCCCGAGGTCGCCACATCGGTCGATCGGTCGCTCGGTGATGGCGGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGCGCGTGGTCA 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGCGCGTGGTCA 360
QY 361 ACAGATCCACTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCT 420
Db 361 ACAGATCCACTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCT 420
QY 421 CGCCGATCGAGACAAAGGCGCGGTTTCGGCGAGGCGCGGTTTCGGCGAGGCGCGGTTTC 480
Db 421 CGCCGATCGAGACAAAGGCGCGGTTTCGGCGAGGCGCGGTTTCGGCGAGGCGCGGTTTC 480
QY 481 GCGAGTTCGAGTACGTCGCTTCGTCGAGTGGACTACATGACGCTGTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTTCGTCGAGTGGACTACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGTGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 600
Db 541 TGTGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 600
QY 601 TGTGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 660
Db 601 TGTGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 660
QY 661 TGGGACCCGCGCATGGAGCTGCGCGCGCGCATGCGAGCGCGGCGAGCT 705
Db 661 TGGGACCCGCGCATGGAGCTGCGCGCGCGCATGCGAGCGCGGCGAGCT 705

```

```

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02

```

```

; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

```

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGGCACCGACGAGTTCCTCCAGTTTCATGGACAGAACACCCGC 120
Db 61 CGATCAAGAGTTCTTTCGGCACCGACGAGTTCCTCCAGTTTCATGGACAGAACACCCGC 120
QY 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCCACATCGGTCGATCGGTCGCTCGGTGATGGCGGG 240
Db 181 AGCGGCGCGGCTGGAGGTCGCCACATCGGTCGATCGGTCGCTCGGTGATGGCGGG 240
QY 241 TCGAGACCCCGAGGTCGCCACATCGGTCGATCGGTCGCTCGGTGATGGCGGG 300
Db 241 TCGAGACCCCGAGGTCGCCACATCGGTCGATCGGTCGCTCGGTGATGGCGGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGCGCGTGGTCA 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGCGCGTGGTCA 360
QY 361 ACAGATCCACTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCT 420
Db 361 ACAGATCCACTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCT 420
QY 421 CGCCGATCGAGACAAAGGCGCGGTTTCGGCGAGGCGCGGTTTCGGCGAGGCGCGGTTTC 480
Db 421 CGCCGATCGAGACAAAGGCGCGGTTTCGGCGAGGCGCGGTTTCGGCGAGGCGCGGTTTC 480
QY 481 GCGAGTTCGAGTACGTCGCTTCGTCGAGTGGACTACATGACGCTGTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTTCGTCGAGTGGACTACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGTGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 600
Db 541 TGTGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 600
QY 601 TGTGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 660
Db 601 TGTGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 660
QY 661 TGGGACCCGCGCATGGAGCTGCGCGCGCGCATGCGAGCGCGGCGAGCT 705
Db 661 TGGGACCCGCGCATGGAGCTGCGCGCGCGCATGCGAGCGCGGCGAGCT 705

```

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RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US

```

; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1999-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 24  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
; US-09-285-306-24

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
DB 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
QY 61 CGATCAAGGAGTCTTTCGGCACACGACCGAGCTGTCCAGTTTCATGGACCAACACCCGC 120  
DB 61 CGATCAAGGAGTCTTTCGGCACACGACCGAGCTGTCCAGTTTCATGGACCAACACCCGC 120  
QY 121 TGTCTGGGGCTCACCAACGCGCGCTGTTCGGCGTGGCGCGGTGGTCTGTCTCCGCG 180  
DB 121 TGTCTGGGGCTCACCAACGCGCGCTGTTCGGCGTGGCGCGGTGGTCTGTCTCCGCG 180  
QY 181 AGCGGGCGGGCTGGAGGTTCGGCGACGTGCACCGCTCCCACTACGGCGCGGATGTGCCGA 240  
DB 181 AGCGGGCGGGCTGGAGGTTCGGCGACGTGCACCGCTCCCACTACGGCGCGGATGTGCCGA 240  
QY 241 TCAGACACCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGGTGTATGCGCGG 300  
DB 241 TCAGACACCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGGTGTATGCGCGG 300  
QY 301 TCAACCGTTCGGGTTCATCGAGACCGCTTACCGCAAGGTGGTCGACGGCGTGGTCACCG 360  
DB 301 TCAACCGTTCGGGTTCATCGAGACCGCTTACCGCAAGGTGGTCGACGGCGTGGTCACCG 360  
QY 361 ACAGATCCACTACCTGACCGCGCAGAGGAGACCGCACGTGGTGGCGAGGCCAACT 420  
DB 361 ACAGATCCACTACCTGACCGCGCAGAGGAGACCGCACGTGGTGGCGAGGCCAACT 420  
QY 421 CGCGGATCGACGACAAAGGGCGGTTCGCGAGGACCGGGTGTGGTTCGCGCGCAAGCGG 480  
DB 421 CGCGGATCGACGACAAAGGGCGGTTCGCGAGGACCGGGTGTGGTTCGCGCGCAAGCGG 480  
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGAATACATGGACGTGTCCGCGCGCAGA 540  
DB 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGAATACATGGACGTGTCCGCGCGCAGA 540  
QY 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCGAGACGACGCGCAACCGTGCCC 600  
DB 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCGAGACGACGCGCAACCGTGCCC 600  
QY 601 TGATGGGCGCAACATCGACGCGCGGTTCGCTGGTGGCGAGCGCGCGCTCG 660  
DB 601 TGATGGGCGCAACATCGACGCGCGGTTCGCTGGTGGCGAGGCGCGCTCG 660  
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705  
DB 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705

RESULT 12  
US-09-285-306-17  
; Sequence 17, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 17  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
; US-09-285-306-17

Query Match 99.8%; Score 703.4; DB 9; Length 705;  
Best Local Similarity 99.9%; Pred. No. 1.9e-155;  
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
DB 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
QY 61 CGATCAAGGAGTCTTTCGGCACACGACCGAGCTGTCCAGTTTCATGGACCAACACCCGC 120  
DB 61 CGATCAAGGAGTCTTTCGGCACACGACCGAGCTGTCCAGTTTCATGGACCAACACCCGC 120  
QY 121 TGTCTGGGGCTCACCAACGCGCGCTGTTCGGCGTGGCGCGGTGGTCTGTCTCCGCG 180  
DB 121 TGTCTGGGGCTCACCAACGCGCGCTGTTCGGCGTGGCGCGGTGGTCTGTCTCCGCG 180  
QY 181 AGCGGGCGGGCTGGAGGTTCGGCGACGTGCACCGCTCCCACTACGGCGCGGATGTGCCGA 240  
DB 181 AGCGGGCGGGCTGGAGGTTCGGCGACGTGCACCGCTCCCACTACGGCGCGGATGTGCCGA 240  
QY 241 TCAGACACCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGGTGTATGCGCGG 300  
DB 241 TCAGACACCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGGTGTATGCGCGG 300  
QY 301 TCAACCGTTCGGGTTCATCGAGACCGCTTACCGCAAGGTGGTCGACGGCGTGGTCACCG 360  
DB 301 TCAACCGTTCGGGTTCATCGAGACCGCTTACCGCAAGGTGGTCGACGGCGTGGTCACCG 360  
QY 361 ACAGATCCACTACCTGACCGCGCAGAGGAGACCGCACGTGGTGGCGAGGCCAACT 420  
DB 361 ACAGATCCACTACCTGACCGCGCAGAGGAGACCGCACGTGGTGGCGAGGCCAACT 420  
QY 421 CGCGGATCGACGACAAAGGGCGGTTCGCGAGGACCGGGTGTGGTTCGCGCGCAAGCGG 480  
DB 421 CGCGGATCGACGACAAAGGGCGGTTCGCGAGGACCGGGTGTGGTTCGCGCGCAAGCGG 480  
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGAATACATGGACGTGTCCGCGCGCAGA 540  
DB 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGAATACATGGACGTGTCCGCGCGCAGA 540  
QY 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCGAGACGACGCGCAACCGTGCCC 600  
DB 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCGAGACGACGCGCAACCGTGCCC 600  
QY 601 TGATGGGCGCAACATCGACGCGCGGTTCGCTGGTGGCGAGCGCGCGCTCG 660  
DB 601 TGATGGGCGCAACATCGACGCGCGGTTCGCTGGTGGCGAGGCGCGCTCG 660  
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705  
DB 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705

RESULT 13  
US-09-285-306-3  
; Sequence 3, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas

```
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGCGATCACACCGACAGCCGTGATCAACATCCGTCCAGTCGTGGCG 60
DB 1 CCCAGACGTGGAGCGATCACACCGACAGCCGTGATCAACATCCGTCCAGTCGTGGCG 60
QY 61 CGATCAAGAGGTTCTTCGGCACAGCCAGCTGCCAGTTCATGAGCAGAAACAACCCGC 120
DB 61 CGATCAAGAGGTTCTTCGGCACAGCCAGCTGCCAGTTCATGAGCAGAAACAACCCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTGCGCGCTGGCGCCGGTGTCTGTCCCGG 180
DB 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTGCGCGCTGGCGCCGGTGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTGACCCGTCACCTACGCGCGGATGTCGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGACGTGACCCGTCACCTACGCGCGGATGTCGCCGA 240
QY 241 TCAGACACCCGGAGGTCCTCAACATCGGTCGTGATCGGTCGTGATGCGCGGG 300
DB 241 TCAGACACCCGGAGGTCCTCAACATCGGTCGTGATCGGTCGTGATGCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCCGTTACCGCAAGGTGGTCGACGGCGTCA 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCCGTTACCGCAAGGTGGTCGACGGCGTCA 360
QY 361 ACAGATTCACCTACCTGACCGGACGAGAGGACCGCACGTCGTGGCGGCGCAACT 420
DB 361 ACAGATTCACCTACCTGACCGGACGAGAGGACCGCACGTCGTGGCGGCGCAACT 420
QY 421 CGCCGATTCAGCAAAAGGCGCGTTCCGAGAGGCGCGGTCGTCGTCGTCGTCGTCG 480
DB 421 CGCCGATTCAGCAAAAGGCGCGTTCCGAGAGGCGCGGTCGTCGTCGTCGTCGTCG 480
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGAGGTCGATACATGAGCGTCGCCGCGCAGA 540
DB 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGAGGTCGATACATGAGCGTCGCCGCGCAGA 540
QY 661 TGGGCAACCGGATGAGCTGCGCGCGCGATCGACGCGCGAGT 705
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DB 661 TGGGCAACCGGATGAGCTGCGCGCGCGATCGACGCGCGAGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCG 60
DB 1 CCCAGACGTGGAGCGATCACACCGCAGACCCCTGATCAACNTCCGTCCCGTCGTGGCG 60
QY 61 CGATCAAGAGGTTCTTCGGCACAGCCAGCTGTCACAGTTCATGAGCAGAAACAACCCGC 120
DB 61 CGATCAAGAGGTTCTTCGGCACAGCCAGCTGTCACAGTTCATGAGCAGAAACAACCCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTGCGCGCTGGCGCCGGTGTCTGTCCCGG 180
DB 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTGCGCGCTGGCGCCGGTGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTGACCCGTCACCTACGCGCGGATGTCGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGACGTGACCCGTCACCTACGCGCGGATGTCGCCGA 240
QY 241 TCAGACACCCGGAGGTCCTCAACATCGGTCGTGATCGGTCGTGTCGTCGTCGTCG 300
DB 241 TCAGACACCCGGAGGTCCTCAACATCGGTCGTGATCGGTCGTGTCGTCGTCGTCG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCCGTTACCGCAAGGTGGTCGACGGCGTCA 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCCGTTACCGCAAGGTGGTCGACGGCGTCA 360
QY 361 ACAGATTCACCTACCTGACCGGACGAGAGGACCGCACGTCGTGGCGGCGCAACT 420
DB 361 ACAGATTCACCTACCTGACCGGACGAGAGGACCGCACGTCGTGGCGGCGCAACT 420
QY 421 CGCCGATTCAGCAAAAGGCGCGTTCCGAGAGGCGCGGTCGTCGTCGTCGTCGTCG 480
DB 421 CGCCGATTCAGCAAAAGGCGCGTTCCGAGAGGCGCGGTCGTCGTCGTCGTCGTCG 480
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGAGGTCGATACATGAGCGTCGCCGCGCAGA 540
DB 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGAGGTCGATACATGAGCGTCGCCGCGCAGA 540
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QY 541 TGGTGTGGGCGGCGGATGATCCGTTCTCGAGCAGCAGCGCCAAACCGTGCCC 600  
 Db |||||  
 QY 541 TGGTGTGGGCGGCGGATGATCCGTTCTCGAGCAGCAGCGCCAAACCGTGCCC 600  
 Db |||||  
 QY 601 TGATGGCGGCGCAACATCAGCGCGGCGGTTCCGTTGGTCCGAGCAGCGCGCGTG 660  
 Db |||||  
 QY 601 TGATGGCGGCGCAACATCAGCGCGGCGGTTCCGTTGGTCCGAGCGCGCGTG 660  
 Db |||||  
 QY 661 TGGGCAACCGGATGAGCTCGGCGCGGATCGACGCGGCGAGCT 705  
 Db |||||  
 QY 661 TGGGCAACCGGATGAGCTCGGCGCGGATCGACGCGGCGAGCT 705  
 Db |||||

RESULT 15

US-09-285-306-10  
 ; Sequence 10, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gengeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 10  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 ; US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;  
 Best Local Similarity 98.0%; Pred. No. 1.6e-152;  
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
 Db |||||  
 QY 61 CGATCAAGGAGTTCTTCGGCACCGCAGCTGTCCGATTCATGGACGAGCAACCCCGC 120  
 Db |||||  
 QY 121 TGTGGGGCTCACCCAAAGCGCGCTGTCCGGCTGGGCGCGGTGTTCTGTCCCGG 180  
 Db |||||  
 QY 181 AGCGGGCGGGCTGGAGGCTCCGGACCGTGACACCCGCTCCCACTACGCGCGGATGTGCCGA 240  
 Db |||||  
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTATGCGTGTATGCGCGG 300  
 Db |||||  
 QY 301 TCAACCGGTTCCGGTTTCATCGAGCGCGCTACCGCAGGTGCTCGACGGCGTGTCAACCG 360  
 Db |||||  
 QY 361 ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGCCACGTTGGTGGCGCGGCGCAACT 420  
 Db |||||  
 QY 421 CGCGGATCGACGAAAGGGCGGTTTCGCGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480  
 Db |||||  
 QY 481 GCGAGGTCGAGTACGTGCTCCGCGGCTTCGTCGAGGTGGAATACATGGAGCTGTGCGCGCGCAGA 540

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 Job time : 453.661 secs

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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds  
(without alignments)  
11150.034 Million cell updates/sec

Title: US-09-285-306-9  
Perfect score: 705  
Sequence: 1 ccagacgtggagcgatc.....ggcgatcgagcgagcgatc 705

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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2: /cgn2\_6/ptodata/1/ina/5B-COMB.seq.\*  
3: /cgn2\_6/ptodata/1/ina/6A-COMB.seq.\*  
4: /cgn2\_6/ptodata/1/ina/6B-COMB.seq.\*  
5: /cgn2\_6/ptodata/1/ina/PTUS-COMB.seq.\*  
6: /cgn2\_6/ptodata/1/ina/backfile1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
19	528.8	75.0	620	3	US-08-520-946-137
20	528.8	75.0	620	3	US-08-520-946-139
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23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	5099	4	US-09-887-052-1

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appli
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appli
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, Ap
32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
35	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 20, Appl
36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
37	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
41	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
42	265.2	37.6	3163	4	US-09-596-002-20	Sequence 20, Appl
43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
44	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
45	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App

## ALIGNMENTS

## RESULT 1

US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/797,812  
FILING DATE: 07-FEB-1997  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/017,765  
FILING DATE: 15-MAY-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/629,031  
FILING DATE: 08-APR-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/012,631  
FILING DATE: 01-MAR-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/011,339  
FILING DATE: 08-FEB-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Fitts, Renee A.  
REGISTRATION NUMBER: 35,136  
REFERENCE/DOCKET NUMBER: 16528X-018550  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-326-2400  
TELEFAX: 415-326-2422



```

; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116; Indels 0; Gaps 0;
Matches 639; Conservative 0; Mismatches 60;

Qy 1 CCCAGGACGTGGAGGCGATCACCCGACACCTGATCAACATCCGTCAGTGGCGG 60
Db 761003 CCCAGGACGTGGAGGCGATCACCCGACACCTGATCAACATCCGTCAGTGGCGG 761062

Qy 61 CGATCAAGGAGTCTTCGGACACAGCCAGCTGTCCTGATTCAGGACCAACACCCG 120
Db 761063 CGATCAAGGAGTCTTCGGACACAGCCAGCTGTCCTGATTCAGGACCAACACCCG 761122

Qy 121 TGTCCGGGCTCACCCACAGCGCGCTGTCGGCGTGGCGCGCGGCTGTCTGTCGGGG 180
Db 761123 TGTCCGGGCTCACCCACAGCGCGCTGTCGGCGTGGCGCGCGGCTGTCTGTCAGGT 761182

Qy 181 AGCGGGCGGGCTGGAGGTTCGGACGTGACCCGCTGCCACTAGCGCGCGGATGTCGCCGA 240
Db 761183 AGCGTCCGGGCTGGAGGTTCGGACGTGACCCGCTGCCACTAGCGCGCGGATGTCGCCGA 761242

Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGCTGCTGATGCGCGGG 300
Db 761243 TCAGAAACCCCTGAGGGGCCCAACATCGTCTGATCGGCTCGCTGCTGATGCGCGGG 761302

Qy 301 TCAACCGGTTCCGGTTCATCGACGCGCGTACCGCAAGGTGTCGAGCGGCTGTCACCG 360
Db 761303 TCAACCGGTTCCGGTTCATCGAAACCGCGTACCGCAAGGTGTCGAGCGGCTGTCAGCG 761362

Qy 361 ACAGATTCCTACTACCTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGCGGCAACT 420
Db 761363 ACAGATTCGTTACTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGCGGCAATT 761422

Qy 421 CGCGGATCGACGACAGGGCGGTTTCGGGAGGCGCGGGTGTGTTGTCGCGCGCAAGCGG 480
Db 761423 CGCGGATCGATCGGAGCGGTTCGTTGTCGAGCGCGCGGTGCTGTCGCGCGCAAGCGG 761482

Qy 481 GCGAGGTCGAGTACGTGCGCTCGTCGAGCTGAGTACATGAGACGTGTCGCGCGCGCAGA 540
Db 761483 GCGAGGTCGAGTACGTGCGCTCGTCGAGTACATGAGACGTGTCGCGCGCGCAGA 761542

Qy 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGCGCAACCGTGGCCC 600
Db 761543 TGTGTGCGTGGCCACCGCGATGATCCCTTCTTGAGACGACGACGCGCAACCGTGGCCC 761602

Qy 601 TGATGGGCGCAACATGACGCGCAGCGGCTTCGCTGGTGGCGAGCGCGCGCTGG 660
Db 761603 TCATGGGGGCAACATGACGCGCAGCGGCTTCGCTGGTGGCGAGCGCGCGCTGG 761662

Qy 661 TGGGACCGGATGAGCTGGCGCGCGGATCGACGGG 699
Db 761663 TGGGACCGGATGAGCTGGCGCGCGGATCGACGGG 761701

RESULT 4
US-08-313-185-57

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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

Qy 1 CCAGAGCGTGGAGGCGATCACACCGACACCTGATCAACATCCGTCACAGTGGCGG 60
Db 1124 CCAGAGCGTGGAGGCGATCACACCGACACCTGATCAATATCCGTCGCGTGGTGGCGG 1183

Qy 61 CGATCAAGGAGTCTTCGGCACCGACCGAGCTGCCAGTTCATGGACCAACACCCG 120
Db 1184 CTATCAAGGAATCTTCGGCACCGACCGAGCTGTCGAGTTCATGGATCAACACCCCT 1243

Qy 121 TGTCCGGGCTCACCCACAGCGCGCTGTCGGCGCTGGCGCGCGGTGGTCTGTCCCGGG 180
Db 1244 TGTCCGGGCTGACCCACAGCGCGCTGTCGGCGCTGGCGCGCGGTGGTCTGTCCCGGT 1303

Qy 181 AGCGGCGCGGCTGGAGGTCCGACGTCGCGACGTCACCCGTCACACTACGCGCGGATGTCGCCGA 240
Db 1304 AGCGTCCGGGCTAGAGGTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1363

Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 300
Db 1364 TCAGAGACCCCGAGGGTCCCAACATCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1423

Qy 301 TCAACCGGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 360
Db 1424 TCAACCGGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 1483

```

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QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGACCGCCACGTCGTGGCGCAGGCCAACT 420
    |||||
Db 1484 ACAGATCGAATACCTGACCGCTGACGAGGAGACCGCCCACTCTCTGTGGCGCAGCCAACT 1543
QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCGGTGTGTGTCGCGCGCAAGCGG 480
    |||||
Db 1544 CGCCGATCGACGAGGCGCGGTTCCTCGAGCGCGCGTGTGTGGGTGCGCGCAAGCGG 1603
QY 481 GCGAGTTCGAGTACGTCCTCTGTCGAGGTGACACTACATGACGTCGTGTCGCGCGCAGA 540
    |||||
Db 1604 GCGAGTTCGAGTACGTCCTCTGTCGAGGTGACACTACATGACGTCGTGTCGCGCGCAGA 1663
QY 541 TGTGTTCGTGGCGCACCGCGATATCCCGTTCCTCGAGCACGACGACGCGCAACCGTGCCC 600
    |||||
Db 1664 TGTGTTCGTGGCGCACCGCGATATCCCGTTCCTCGAGCACGACGACGCGCAACCGTGCCC 1723
QY 601 TGATGGCGCCCAACATGACGCGCGCAGCGGTTCCGCTGTGTGCGCAGCGCGCGCTGG 660
    |||||
Db 1724 TGATGGCGCGTAACATGACGCGCGCAAGCGTTCCGTTGTGTGGCGACGAAACGACGTTGG 1783
QY 661 TGGGACCGCGATGAGCTGCGCGCGCGCGGATCGACGCGG 699
    |||||
Db 1784 TGGGTACCGGTATGGAGTTGCGCGCGCGCCATCGACGCTG 1822

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RESULT 5

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US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082,614A
; FILING DATE:
; CLASSIFICATION:

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

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; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57

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Query Match 79.2%; Score 558.2; DB 3; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

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QY 1 CCCAGAGCTGGAGCGGATCACACGCGAGACCTCATCAACATCCGTCAGTCGTCGGCGG 60
    |||||
Db 1124 CCCAGAGCTGGAGCGGATCACCGCGGAGATCACCGCGAGACCTCATCAATCCGTCGTCGGCGG 1183
QY 61 CGATCAAGAGAGTCTTTCGGCACACGACGCTGTCCAGTTCATGACGACAGAAACAACCCGC 120
    |||||
Db 1184 CTATCAAGGAATCTTCGGCACACGACGCTGTCCAGTTCATGATCAGAAACAACCCCTC 1243
QY 121 TGTGCGGCGTCAACCAAGCGCGCGCTGTGCGCGCTGGCGCGCGGTGTGTCTGTCGCGG 180
    |||||
Db 1244 TGTGCGGCGTCAACCAAGCGCGCGCTGTGCGCGCTGGCGCGCGGTGTGTCTGTCGCGTG 1303
QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTCGACCCGTCGACCTACGCGCGGATGCGCCGA 240
    |||||
Db 1304 AGCGTGGCGGCTAGAGGTCCGTCGACGTCGACCTTCGACCTACGCGCGGATGCGCCGA 1363
QY 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
    |||||
Db 1364 TCGAGACTCCGAGGCGCGCAACATAGGTCTGATCGGTTTATTGTCGGTGTACGCGCGGG 1423
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGAAGGTGTGACGCGGTGTGTCACCG 360
    |||||
Db 1424 TCAACCCCTTCGGGTTTCATCGAACAACCGTACCGCAAAAGTGGTTGACGCTGTGTCAGCG 1483
QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCGCCACGTCGTGGCGCAGGCCAACT 420
    |||||
Db 1484 ACGAGATCGAATACCTTTCGCGCTGACGAGGAGACCGCCATGTCTGTGGCGCAGGCCAACT 1543
QY 421 CGCCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCGGTGTGTCGTCGCGCAAGCGCG 480
    |||||
Db 1544 CGCCGATCGACGAGGCGCGCGTTCCTCGAGCGCGCGTGTGGGTGCGCGCAAGCGCG 1603
QY 481 GCGAGTTCGAGTACGTCGCGCTGTGCGAGGTGACACTACATGACGCTGTGTCGCGCGCAGA 540
    |||||
Db 1604 GCGAGTTCGAGTACGTCGCGCTGTGCGAGGTGAGTTACATGATGATGTCTGCGCACGCGCAGA 1663
QY 541 TGTGTTCGTGGCGCACCGCGATGATCCGTTCTCTCGAGCACGACGACGCAACCGTCGCC 600
    |||||
Db 1664 TGTGTTCGTGGCGCACCGCGATGATTCGTTCTTTCGAGCACGACGACGCAACCGTCGCC 1723
QY 601 TGATGGCGCCCAACATGACGCGCGCGGTTTCGCTGTGTGCGCAGCGCGCGCTGG 660
    |||||
Db 1724 TGATGGCGCGTAACATGACGCGCGCAAGCGTTCCGTTGTGTGGCGAGCGAACGACGTTGG 1783
QY 661 TGGGACCGCGATGAGCTGCGCGCGCGCGGATCGACGCGG 699
    |||||
Db 1784 TGGGTACCGGTATGGAGTTGCGCGCGCGCCATCGACGCTG 1822

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RESULT 6

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US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA

```

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; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

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Query Match      76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
DB 341 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 400

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAACAAACCCCG 120
DB 401 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTAGCCATTCATGGACCAACAAACCCCG 460

QY 121 TGTCCGGGTCACCCACCAAGCGCCGCTGTCCGGCTGTGGCCCGGGTGTCTGTCCGGG 180
DB 461 TGTCCGGGTTGACCCACCAAGCGCCGCTGTCCGGCTGTGGCCCGGGTGTCTGTCCGGG 520

QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTCACCCGTCACCCGTCACCCGTCACCCGTCACCCG 240
DB 521 AGCGTCCGGGCTGGAGGTCGCGACGTCACCCGTCACCCGTCACCCGTCACCCGTCACCCG 580

QY 241 TCGAGACCCCGGAGGTCACCAACATCCGTCTGATCCGGTCTGATCCGGTCTGATCCGGTCTGATCCGG 300
DB 581 TCGAACCCTTCGAGGGCCCAACATCCGTCTGATCCGGTCTGATCCGGTCTGATCCGGTCTGATCCGG 640

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTGTGACGCGGTGTGTGACCG 360
DB 641 TCAACCCGTTCCGGTTTCATCGAAGCGCCGTACCGCAAGGTGTGTGACGCGGTGTGTGACCG 700

QY 361 ACGAGATCCACTTACCTGACCGCGGACGAGGAGCCGCGACCTGCTGGTGGCGGCGGCAACT 420
DB 701 ACGAGATCCACTTACCTGACCGCGGACGAGGAGCCGCGACCTGCTGGTGGCGGCGGCAACT 760

QY 421 CGCGGATTCGACGACCAAGCGGCTGTCCGGAGGCGCGGGTGTGGTCCGCGCGCAAGCGCG 480
DB 761 CGCGGATTCGACGACCGGCTGTCCGGAGGCGCGGGTGTGGTCCGCGCGCAAGCGCG 820

QY 481 GCGAGTTCGAGTACGTCCCTCTGTCCGAGTGGACTACATGGACGCTGTCCGCGCGCGCAGA 540
DB 821 GCGAGTTCGAGTACGTCCCTCTGTCCGAGTGGACTACATGGACGCTGTCCGCGCGCGCAGA 880

QY 541 TGTGTCCGTGGCCACCGCGATGATCCGTTCTTCGAGCACGACGAGCGCCAAACCGTCCCG 600
DB 881 TGTGTCCGTGGCCACCGCGATGATCCGTTCTTCGAGCACGACGAGCGCCAAACCGTCCCG 940

QY 601 TGATGGGCGCAACATGACGCGCGGCGG 630
DB 941 TCATGGGCGCAACATGACGCGCGGCGG 970

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RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105WO1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1

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Query Match      76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
DB 341 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 400

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAACAAACCCCG 120
DB 401 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTAGCCATTCATGGACCAACAAACCCCG 460

QY 121 TGTCCGGGTCACCCACCAAGCGCCGCTGTCCGGCTGTGGCCCGGGTGTCTGTCCGGG 180
DB 461 TGTCCGGGTTGACCCACCAAGCGCCGCTGTCCGGCTGTGGCCCGGGTGTCTGTCCGGG 520

QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTCACCCGTCACCCGTCACCCGTCACCCGTCACCCG 240
DB 521 AGCGTCCGGGCTGGAGGTCGCGACGTCACCCGTCACCCGTCACCCGTCACCCGTCACCCG 580

QY 241 TCGAGACCCCGGAGGTCACCAACATCCGTCTGATCCGGTCTGATCCGGTCTGATCCGGTCTGATCCGG 300
DB 581 TCGAACCCTTCGAGGGCCCAACATCCGTCTGATCCGGTCTGATCCGGTCTGATCCGGTCTGATCCGG 640

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTGTGACGCGGTGTGTGACCG 360
DB 641 TCAACCCGTTCCGGTTTCATCGAAGCGCCGTACCGCAAGGTGTGTGACGCGGTGTGTGACCG 700

QY 361 ACGAGATCCACTTACCTGACCGCGGACGAGGAGCCGCGACCTGCTGGTGGCGGCGGCAACT 420

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;
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGCGGCGATCAAGAGGTTCTTCGGCACCAGCAGCTGTCC 95
Db 620 ATCAACATCCGCGGTCGCGCGGATCAAGAGGTTCTTCGGCACCAGCAGCTGAGC 561

QY 96 CAGTTTCATGACAGCAAAACCCGCTGTGCGGGCTCAACCAAGCGCCCTGTGCGGC 155
Db 560 CAATTCATGACAGCAAAACCCGCTGTGCGGGTTGACCCACAAGCGCGACTGTGCGG 501

QY 156 CTGGGCCCGGTCGTCGCGGAGCGCGGCTGAGGTTCGCGACGTGACCCG 215
Db 500 CTGGGCCCGGTCGTCACGTGAGCGTGCCTGGGCTGAGGTTCGCGACGTGACCCG 441

QY 216 TCCCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGTCCTCAACATCGCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCGCGGATCGAAACCCCTGAGGGGCGCAACATCGCTGATC 381

QY 276 GGCTCGCTGTCGCTGATGCGCGGTCACCCCGTTTCGGGTTTCATCGAGACGCGGTACCCG 335
Db 380 GGCTCGCTGTCGCTGATGCGCGGTCACCCCGTTTCGGGTTTCATCGAAACCGCGTACCG 321

QY 336 AAGGTGTCAGCGCGGTGTCACGAGCAGATCCACTACTGACCGCGCAGAGGAGC 395
Db 320 AAGGTGTCAGCGCGGTGTCAGCAGATGTCGCTGACCTGACCGCGCAGAGGAGC 261

QY 396 CGCACGTCGTGCGCAGGCAACTCGCGGATCGAGCAAGGCGCGGTTTCGCGGAGGC 455
Db 260 CGCACGTCGTGCGCAGGCAACTCGCGGATCGAGCAAGGCGCGGTTTCGCTGCGAGCG 201

QY 456 CGGTCGTCGTCGCGCGCAGGCGGTCAGTACGTGCTGCTGTCGCGAGGTGAGC 515
Db 200 CGGTCGTCGTCGCGCGCAGGCGGTCAGTACGTGCTGCTGTCGAGGTGAGC 141

QY 516 TACATGACGTCGCGCGCAGATGTCGTCGTCGCGCAGATGTCGTCGTCGTCCTC 575
Db 140 TACATGACGTCGCGCGCAGATGTCGTCGTCGCGCAGATGTCGTCGTCGTCCTC 81

QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
Db 80 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 21

QY 636 CTGGTCGCGCAGGAGCGCC 655
Db 20 CTGGTCGCGCAGGAGCGCC 1
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RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

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;
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match          75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGCGGCGATCAAGAGGTTCTTCGGCACCAGCAGCTGTCC 95
Db 1 ATCAACATCCGCGGTCGTCGCGGATCAAGAGGTTCTTCGGCACCAGCAGCTGAGC 60

QY 96 CAGTTTCATGACAGCAAAACCCGCTGTGCGGGCTCAACCAAGCGCCCTGTGCGGC 155
Db 61 CAATTCATGACAGCAAAACCCGCTGTGCGGGTTGACCCACAAGCGCGCTGTGCGGC 120

QY 156 CTGGGCCCGGTCGTCGCGGAGCGCGGCTGAGGTTCGCGACGTGTCACCCG 215
Db 121 CTGGGCCCGGTCGTCACGTGAGCGTTCGCGGCTGAGGTTCGCGACGTGTCACCCG 180

QY 216 TCCCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGTCCTCAACATCGCTGATC 275
Db 181 TCCCACTACGCGCGGATGTCGCGGATCGAAACCCCTGAGGGGCGCAACATCGCTGATC 240

QY 276 GGTCTGCTGTCGCTGATGCGCGGTCACCCGTTTCGGGTTTCATCGAGACGCGCTACCCG 335
Db 241 GGTCTGCTGTCGCTGATGCGCGGTCACCCGTTTCGGGTTTCATCGAAACCGCTACCCG 300

QY 336 AAGGTGTCAGCGCGTCGTCACCGACGAGATCCACTACTGACCCCGCAGAGGAGC 395
Db 301 AAGGTGTCAGCGCGTCGTCAGCGACGAGATCGTACTGACCCCGCAGAGGAGC 360

QY 396 CGCACGTCGTGCGCAGGCAACTCGCGGATCGAGCAAGGCGCGGTTTCGCGGAGGC 455
Db 361 CGCACGTCGTGCGCAGGCAACTCGCGGATCGAGCAAGGCGCGGTTTCGCTGCGAGCG 420

QY 456 CGGTCGTCGTCGCGCGCAGGCGGTCAGTACGTGCTGCTGTCGCGAGGTGAGC 515
Db 421 CGGTCGTCGTCGCGCGCAGGCGGTCAGTACGTGCTGCTGTCGCTGCTGAGGTGAGC 480

QY 516 TACATGACGTCGCGCGCAGATGTCGTCGTCGCGCAGATGATGTCCTGTCCTC 575
Db 481 TACATGACGTCGCGCGCAGATGTCGTCGTCGCGCAGATGATGTCCTTCTCCTG 540

QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
Db 541 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600

QY 636 CTGGTCGCGCAGGAGCGCC 655
Db 636 CTGGTCGCGCAGGAGCGCC 655
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Db      601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCCGCGGCGATCAAGGAGTTCTTCGGCACACGAGCTGTCC 95
Db      620 ATCAACATCCGCGGTGTGCGCGGATCAAGGAGTTCTTCGGCACACGAGCTGAGC 561

Qy      96 CAGTTTCATGACACAGAACCCGCTGTGCGGGCTCACCCACAAGCGCGCCCTGTGCGGC 155
Db      560 CAATTTCATGACACAGAACCCGCTGTGCGGGTTGACCCACAAGCGCGACTGTGCGGC 501

Qy      156 CTGGGCGCGGTGTGCTGTGCGGAGCGGGCGGGCTGGAGGTGCGGACGTGACCCG 215
Db      500 CTGGGCGCGCGGTGTGTCAGTGTGAGCGGTGCGGGCTGGAGGTGCGGACGTGACCCG 441

Qy      216 TCCACTACGCGCGGATGTCGCGATCGAGACCCGAGGGTCCCAACATCGGTCTGATC 275
Db      440 TCGACTACGCGCGGATGTCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

Qy      276 GGCTCGCTGTGCTGTATGCGGGGTCAACCCGTTGCGGTTTCATCGAGACGCCGTACCCG 335
Db      380 GGCTCGCTGTGCTGTATGCGGGGTCAACCCGTTGCGGTTTCATCGAAACGCCGTACCCG 321

Qy      336 AAGTGTGTACGCGGTGTGTACCGACGAGATCCACTACTGACCGCGCGACGAGAGGAC 395
Db      320 AAGTGTGTACGCGGTGTGTAGCGACGAGATCGTGTACTGTACCGCGCGACGAGGAGGAC 261

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Qy      396 CGCCACGTGGTGGCGAGGCCAACTCGCGCATCGACGACAAGGGCGGTTTCGGGAGGCC 455
Db      260 CGCCACGTGGTGGCACAGGCCAACTTCGCGCATCGATCGGACGCTCGCTTCGTGAGCCG 201

Qy      456 CGGGTGTGGTCCGCGCGCAAGCGCGGAGGTGCGAGTACGTGCCCTCGTCCGAGGTGGAC 515
Db      200 CGGGTGTGGTCCGCGCGCAAGCGCGGAGGTGCGAGTACGTGCCCTCGTCTGAGGTGGAC 141

Qy      516 TACATGGAGCTGTGCGCGCGCGAGATGTTGCGTGGCCACCGCATGATCCGTTCCCTC 575
Db      140 TACATGGAGCTGTGCGCGCGCGAGATGTTGCGTGGCCACCGCATGATCCCTTCCTG 81

Qy      576 GAGCAGCAGCAGCCCAACCGTCCCTGATGGCGGCAACATCAGCGCCAGCGGTTCCG 635
Db      80 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAACATCAGCGCCAGCGGTTCCG 21

Qy      636 CTGGTGGCAGCAGCGGCC 655
Db      20 CTGGTCCGTAGCGAGGCCCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCCGCGGCGATCAAGGAGTTCTTCGGCACACGAGCTGTCC 95
Db      1 ATCAACATCCGCGGTGTGCGCGGATCAAGGAGTTCTTCGGCACACGAGCTGAGC 60

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Db      241  GGCTCGCTGTCGGTGTACGCGCGGGTCAACCCCGTTCCGGTTTCATCGAAGCGCGGTACCGC 300
Qy      336  AAGTGTGTCGACGGCGTGGTCAACGACGAGATCCACTACCTGACCGCGACGAGGAGAC 395
Db      301  AAGTGTGTCGACGGCGTGGTGTAGCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGAC 360
Qy      396  CGCCACGTGTGGCGCGAGGCCAACTCGCCGATCGACGACAAAGGGCGGGTTCGCGGAGGCC 455
Db      361  CGCCACGTGTGGCGACAGGCCAATTCCCGGATCGATCCGACCGTCCGTCGAGCCG 420
Qy      456  CGGTGTGTCGTCCGCCCGCAAGCGGGCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAC 515
Db      421  CGGTGTGTCGTCCGCCCGCAAGCGGGCGAGGTGAGTACGTGCGCTCGTCTGAGGTGGAC 480
Qy      516  TACATGACGTGTCCGCCCGCGCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 575
Db      481  TACATGACGTGTCCGCCCGCGCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 540
Qy      576  GAGCACGACGACGCCAACCGTGCCTGATGGGCGCCAAACATGCGCGCCGAGCGGTTCGG 635
Db      541  GAGCACGACGACGCCAACCGTGCCTCATGGGGGCAAAACATGCGCGCCGAGCGGTGCGG 600
Qy      636  CTGGTCCGCGAGCGAGCGGCC 655
Db      601  CTGGTCCGTAGCGAGGCCCC 620

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Search completed: August 24, 2005, 22:25:21  
 Job time : 115.459 secs

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Result No.	Query #			DB	ID	Description
	Score	Match	Length			
1	705	100.0	705	9	US-09-285-306-4	Sequence 4, Appli
2	705	100.0	705	9	US-09-285-306-5	Sequence 5, Appli
3	705	100.0	705	9	US-09-285-306-6	Sequence 6, Appli
4	705	100.0	705	9	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	9	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	9	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	9	US-09-285-306-12	Sequence 12, Appl

QY 61 CGATCAAGGAGTTCTTTCGGCACAGCCAGCTGTCCAGATTTCATGGACCAAGCAACCCGC 120  
 Db |||||  
 QY 61 CGATCAAGGAGTTCTTTCGGCACAGCCAGCTGTCCAGTTTCATGGACCAAGCAACCCGC 120  
 Db |||||  
 QY 121 TGTCCGGGCTCACCCACAGCCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180  
 Db |||||  
 QY 121 TGTCCGGGCTCACCCACAGCCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180  
 Db |||||  
 QY 181 AGCGGCGCGGCTGGAGGTTCGGGAGTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240  
 Db |||||  
 QY 181 AGCGGCGCGGCTGGAGGTTCGGGAGTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240  
 Db |||||  
 QY 241 TCAGACCCCGGAGGCTCCCAACATCGGTCTGATCGGCTCGTGTTCGGTGTATGCCGCGG 300  
 Db |||||  
 QY 301 TCACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGCGGTGGTCAACG 360  
 Db |||||  
 QY 301 TCACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGCGGTGGTCAACG 360  
 Db |||||  
 QY 361 ACAGATCCACTACCTACCGCGAGGAGGACCGCACGTTGGTGGCGAGGCCAACT 420  
 Db |||||  
 QY 361 ACAGATCCACTACCTACCGCGAGGAGGACCGCACGTTGGTGGCGAGGCCAACT 420  
 Db |||||  
 QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGGAGGCGCGGTGTCTGTTCGCCCGCAAGGCGG 480  
 Db |||||  
 QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGGAGGCGCGGTGTCTGTTCGCCCGCAAGGCGG 480  
 Db |||||  
 QY 481 GCGAGTTCAGTACGTCCTGTTCGGAGGTGACTACATGAGCGTGTTCGCCCGCGCAGA 540  
 Db |||||  
 QY 481 GCGAGTTCAGTACGTCCTGTTCGGAGGTGACTACATGAGCGTGTTCGCCCGCGCAGA 540  
 Db |||||  
 QY 541 TGTGTTCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCAACCGTGGCC 600  
 Db |||||  
 QY 541 TGTGTTCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCAACCGTGGCC 600  
 Db |||||  
 QY 601 TGATGGCGCCAACTGACGCGCAGGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660  
 Db |||||  
 QY 601 TGATGGCGCCAACTGACGCGCAGGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660  
 Db |||||  
 QY 661 TGGGCAACCGCATGAGCTGCGCGCGCGATCGACCGCGGAGCT 705  
 Db |||||  
 QY 661 TGGGCAACCGCATGAGCTGCGCGCGCGATCGACCGCGGAGCT 705  
 Db |||||

RESULT 2  
 US-09-285-306-5  
 ; Sequence 5, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 5  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 ; US-09-285-306-5  
 Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCAGGACGTTGGAGGCGATCACACCGCAGACCTGATCAACATCCCTCAGTCCAGTCCGTGGCGG 60  
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Db 1 CCCAGGACGTTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60  
 QY |||||  
 QY 61 CGATCAAGGAGTTCTTTCGGCACAGCCAGCTGTCCAGTTTCATGGACCAAGCAACCCGC 120  
 Db |||||  
 QY 61 CGATCAAGGAGTTCTTTCGGCACAGCCAGCTGTCCAGTTTCATGGACCAAGCAACCCGC 120  
 Db |||||  
 QY 121 TGTCCGGGCTCACCCACAAAGCGCCCTGTTCGGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180  
 Db |||||  
 QY 121 TGTCCGGGCTCACCCACAAAGCGCCCTGTTCGGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180  
 Db |||||  
 QY 181 AGCGGCGCGGCTGGAGGTTCGGGAGTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240  
 Db |||||  
 QY 181 AGCGGCGCGGCTGGAGGTTCGGGAGTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240  
 Db |||||  
 QY 241 TCAGACCCCGGAGGCTCCCAACATCGGTCTGATCGGCTCGTGTTCGGTGTATGCCGCGG 300  
 Db |||||  
 QY 241 TCAGACCCCGGAGGCTCCCAACATCGGTCTGATCGGCTCGTGTTCGGTGTATGCCGCGG 300  
 Db |||||  
 QY 301 TCACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGCGGTGGTCAACG 360  
 Db |||||  
 QY 301 TCACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGCGGTGGTCAACG 360  
 Db |||||  
 QY 361 ACAGATCCACTACCTACCGCGAGGAGGACCGCACGTTGGTGGCGAGGCCAACT 420  
 Db |||||  
 QY 361 ACAGATCCACTACCTACCGCGAGGAGGACCGCACGTTGGTGGCGAGGCCAACT 420  
 Db |||||  
 QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGGAGGCGCGGTGTCTGTTCGCCCGCAAGGCGG 480  
 Db |||||  
 QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGGAGGCGCGGTGTCTGTTCGCCCGCAAGGCGG 480  
 Db |||||  
 QY 481 GCGAGTTCAGTACGTCCTGTTCGGAGGTGACTACATGAGCGTGTTCGCCCGCGCAGA 540  
 Db |||||  
 QY 481 GCGAGTTCAGTACGTCCTGTTCGGAGGTGACTACATGAGCGTGTTCGCCCGCGCAGA 540  
 Db |||||  
 QY 541 TGTGTTCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCAACCGTGGCC 600  
 Db |||||  
 QY 541 TGTGTTCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCAACCGTGGCC 600  
 Db |||||  
 QY 601 TGATGGCGCCAACTGACGCGCAGGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660  
 Db |||||  
 QY 601 TGATGGCGCCAACTGACGCGCAGGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660  
 Db |||||  
 QY 661 TGGGCAACCGCATGAGCTGCGCGCGCGATCGACCGCGGAGCT 705  
 Db |||||  
 QY 661 TGGGCAACCGCATGAGCTGCGCGCGCGATCGACCGCGGAGCT 705  
 Db |||||

RESULT 3  
 US-09-285-306-6  
 ; Sequence 6, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 6  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 ; US-09-285-306-6  
 Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCAGGACGTTGGAGGCGATCACACCGCAGACCTGATCAACATCCCTCAGTCCAGTCCGTGGCGG 60  
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Qy 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTGGCGG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCGCTGTCCGCGCTGATGAGACCAAGACCAACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCGCTGTCCGCGCTGATGAGACCAAGACCAACCCGC 120
Qy 121 TGTGGGGCTCACCAAGCGCGCTGTCCGCGCTGATGAGACCAAGACCAACCCGC 180
Db 121 TGTGGGGCTCACCAAGCGCGCTGTCCGCGCTGATGAGACCAAGACCAACCCGC 180
Qy 181 AGCGGGCGGGCTGAGGTCCGACGTGCAACCGCTCCCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGAGGTCCGACGTGCAACCGCTCCCACTACGCGCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGCTGCTGATGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGCTGCTGATGCGCGGG 300
Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACCGGCTGACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACCGGCTGACCG 360
Qy 361 ACAGATCCACTACCTGACCGCGCAGCAGGAGGACCGCACGCTGCTGGCGCGCAAGCGG 420
Db 361 ACAGATCCACTACCTGACCGCGCAGCAGGAGGACCGCACGCTGCTGGCGCGCAAGCGG 420
Qy 421 CGCGATCGACGACCAAGGGCGGTTTCGCGAGGCGCGGTTTCGCGAGGCGCGGTTTCGCGAGGCGG 480
Db 421 CGCGATCGACGACCAAGGGCGGTTTCGCGAGGCGCGGTTTCGCGAGGCGCGGTTTCGCGAGGCGG 480
Qy 481 GCGAGTTCGAGTACGTCCTCGTTCGAGTGGACTACATGAGACGTTCGCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTCCTCGTTCGAGTGGACTACATGAGACGTTCGCGCGCGCAGA 540
Qy 541 TGTGTCGCTGGCGACCGCATGATCCGTTCCGTCGAGCAGCAGCGCGCAACCGTGCC 600
Db 541 TGTGTCGCTGGCGACCGCATGATCCGTTCCGTCGAGCAGCAGCGCGCAACCGTGCC 600
Qy 601 TGATGGCGCCACATCGACGCGCGGTTCCGCTGGTTCGCGAGGCGCGCGCGCGCTGG 660
Db 601 TGATGGCGCCACATCGACGCGCGGTTCCGCTGGTTCGCGAGCAGCAGCGCGCGCGCTGG 660
Qy 661 TGGGACCGCGATGAGCTGCGCGCGCGATCGACGCGCGAGCT 705
Db 661 TGGGACCGCGATGAGCTGCGCGCGCGATCGACGCGCGAGCT 705

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RESULT 4

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US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;

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Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CCAGAGCTGGAGGCGATCACACCGAGACCTGATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACACCGAGACCTGATCAACATCCGTCAGTCCGTGGCGG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCGCTGTCCGCGCTGATGAGACCAAGACCAACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCGCTGTCCGCGCTGATGAGACCAAGACCAACCCGC 120
Qy 121 TGTGGGGCTCACCAAGCGCGCTGTCCGCGCTGATGAGACCAAGACCAACCCGC 180
Db 121 TGTGGGGCTCACCAAGCGCGCTGTCCGCGCTGATGAGACCAAGACCAACCCGC 180
Qy 181 AGCGGGCGGGCTGAGGTCCGACGTGCAACCGCTCCCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGAGGTCCGACGTGCAACCGCTCCCACTACGCGCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGCTGCTGATGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGCTGCTGATGCGCGGG 300
Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACCGGCTGACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACCGGCTGACCG 360
Qy 361 ACAGATCCACTACCTGACCGCGCAGCAGGAGGACCGCACGCTGCTGGCGCGCAAGCGG 420
Db 361 ACAGATCCACTACCTGACCGCGCAGCAGGAGGACCGCACGCTGCTGGCGCGCAAGCGG 420
Qy 421 CGCGATCGACGACCAAGGGCGGTTTCGCGAGGCGCGGTTTCGCGAGGCGCGGTTTCGCGAGGCGG 480
Db 421 CGCGATCGACGACCAAGGGCGGTTTCGCGAGGCGCGGTTTCGCGAGGCGCGGTTTCGCGAGGCGG 480
Qy 481 GCGAGTTCGAGTACGTCCTCGTTCGAGTGGACTACATGAGACGTTCGCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTCCTCGTTCGAGTGGACTACATGAGACGTTCGCGCGCGCAGA 540
Qy 541 TGTGTCGCTGGCGACCGCATGATCCGTTCCGTCGAGCAGCAGCGCGCAACCGTGCC 600
Db 541 TGTGTCGCTGGCGACCGCATGATCCGTTCCGTCGAGCAGCAGCGCGCAACCGTGCC 600
Qy 601 TGATGGCGCCACATCGACGCGCGGTTCCGCTGGTTCGCGAGGCGCGCGCGCTGG 660
Db 601 TGATGGCGCCACATCGACGCGCGGTTCCGCTGGTTCGCGAGCAGCAGCGCGCGCTGG 660
Qy 661 TGGGACCGCGATGAGCTGCGCGCGCGATCGACGCGCGAGCT 705
Db 661 TGGGACCGCGATGAGCTGCGCGCGCGATCGACGCGCGAGCT 705

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RESULT 5

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US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

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Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGACGTGGAGCGATCACACCGACACCTGATCAACATCCGTCCAGTCGTGGCG 60
Db 1 CCAGACGTGGAGCGATCACACCGACACCTGATCAACATCCGTCCAGTCGTGGCG 60

QY 61 CGATCAAGAGTTCCTTCGGCACAGCAGCTGTCCAGTTCATGACACCAACACCCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACAGCAGCTGTCCAGTTCATGACACCAACACCCGC 120

QY 121 TGTCCGGGCTACCCACAAGCGCCCTGTGCGCGTCCGGCCGGGTGTCTGTCCCGG 180
Db 121 TGTCCGGGCTACCCACAAGCGCCCTGTGCGCGTCCGGCCGGGTGTCTGTCCCGG 180

QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGACCCGTCACCTACGCGCGGATGTCGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGACCCGTCACCTACGCGCGGATGTCGCCGA 240

QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGTGATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGTGATGCGCGG 300

QY 301 TCAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCGACGCGGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCGACGCGGTGGTCAACCG 360

QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGACCGCACCGTGTGGCGGCGAGGCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGGACGAGGACCGCACCGTGTGGCGGCGAGGCAACT 420

QY 421 CGCGCATCGACGACAGGCGCGGTTCGCGAGGCGCGGTGCTGTGTCGCGCCGCAAGGCGG 480
Db 421 CGCGCATCGACGACAGGCGCGGTTCGCGAGGCGCGGTGCTGTGTCGCGCCGCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTGTCCTCGTCCGAGGTGAGTACATGACGTCGTCCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGTCCTCGTCCGAGGTGAGTACATGACGTCGTCCGCGCGCAGA 540

QY 541 TGGTGTCCGTGGCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600
Db 541 TGGTGTCCGTGGCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600

QY 601 TGATGGCGCGCAACATGACGCGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGCGCAACATGACGCGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660

QY 661 TGGGACCGGCATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705
Db 661 TGGGACCGGCATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705
```

```
RESULT 6
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
```

```
US-09-285-306-9
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGACGTGGAGCGATCACACCGACACCTGATCAACATCCGTCCAGTCGTGGCG 60
Db 1 CCAGACGTGGAGCGATCACACCGACACCTGATCAACATCCGTCCAGTCGTGGCG 60

QY 61 CGATCAAGAGTTCCTTCGGCACAGCAGCTGTCCAGTTCATGACACCAACACCCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACAGCAGCTGTCCAGTTCATGACACCAACACCCGC 120

QY 121 TGTCCGGGCTACCCACAAGCGCCCTGTGCGCGTCCGGCCGGGTGTCTGTCCCGG 180
Db 121 TGTCCGGGCTACCCACAAGCGCCCTGTGCGCGTCCGGCCGGGTGTCTGTCCCGG 180

QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGACCCGTCACCTACGCGCGGATGTCGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGACCCGTCACCTACGCGCGGATGTCGCCGA 240

QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGTGATGCGCGG 300
Db 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGTGATGCGCGG 300

QY 301 TCAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCGACGCGGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCGACGCGGTGGTCAACCG 360

QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGACCGCACCGTGTGGCGGCGAGGCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGGACGAGGACCGCACCGTGTGGCGGCGAGGCAACT 420

QY 421 CGCGCATCGACGACAGGCGCGGTTCGCGAGGCGCGGTGCTGTGTCGCGCCGCAAGGCGG 480
Db 421 CGCGCATCGACGACAGGCGCGGTTCGCGAGGCGCGGTGCTGTGTCGCGCCGCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTGTCCTCGTCCGAGGTGAGTACATGACGTCGTCCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGTCCTCGTCCGAGGTGAGTACATGACGTCGTCCGCGCGCAGA 540

QY 541 TGGTGTCCGTGGCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600
Db 541 TGGTGTCCGTGGCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600

QY 601 TGATGGCGCGCAACATGACGCGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGCGCAACATGACGCGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660

QY 661 TGGGACCGGCATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705
Db 661 TGGGACCGGCATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705
```

```
RESULT 7
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
```



```
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Qy 61 CGATCAAGAGGTTCTTTCGGACACGACGCTGTCCCGATGTCATGGACCAAGAACACCCCG 120
Db 61 CGATCAAGAGGTTCTTTCGGACACGACGCTGTCCCGATGTCATGGACCAAGAACACCCCG 120
Qy 121 TGTCCGGGCTCACCAACAGCGCCCTGTCCGGCTGGGCGCGGCTGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCAACAGCGCCCTGTTCGGCGCTGGGCGCGGCTGTCTGTCCGGG 180
Qy 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCCGTCACACTACGGCCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCCGTCACACTACGGCCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGGAGGTCACCAACATCGTCTGTATCGGCTCGCTGTGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCACCAACATCGTCTGTATCGGCTCGCTGTGGTGTATGCGCGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCGACGGCGTGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCGACGGCGTGTCAACG 360
Qy 361 ACAGATCCACTACCTGACCGCGA CGAGAGGACCGCCACGTCGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGA CGAGAGGACCGCCACGTCGTGGTGGCGAGGCCAACT 420
Qy 421 CGCGATCGACGACAAAGGCGGTTCCGGAGGCGCCGGTGTCTGGTCCGCGCAAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGGTTCCGGAGGCGCCGGTGTCTGGTCCGCGCAAGGCGG 480
Qy 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGGTGGA CTACATGACAGTGTGCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGGTGGA CTACATGACAGTGTGCGCGCGCAGA 540
Qy 541 TGTGTTCGTGGCCACCGGATGATCCGTTCTTCGAGCA CGACGCGCAACCGTGCCC 600
Db 541 TGTGTTCGTGGCCACCGGATGATCCGTTCTTCGAGCA CGACGCGCAACCGTGCCC 600
Qy 601 TGATGGGCGCAACATCGAGCGGCGGTCGCGGCGGATCGACGCGCGGAGCT 705
Db 601 TGATGGGCGCAACATCGAGCGGCGGTCGCGGCGGATCGACGCGCGGAGCT 705
Qy 661 TGGGCAACCGGCTGAGAGTTCGCGGCGGCGGATCGACGCGCGGAGCT 705
Db 661 TGGGCAACCGGCTGAGAGTTCGCGGCGGCGGATCGACGCGCGGAGCT 705

RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

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; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
DB 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTTCGGCACCAGCAGCTGCCAGTTCATGGACCAAGAACACCCGC 120
DB 61 CGATCAAGAGGTTCTTTCGGCACCAGCAGCTGCCAGTTCATGGACCAAGAACACCCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTGCAACCCGCTCCACTACGCGCGGATGTGCCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGACGTGCAACCCGCTCCACTACGCGCGGATGTGCCCGA 240
QY 241 TCGAGACCCCGGAGGTCGCAACATCGGTCGATCGGTCGCTGTCGCGGTATGCGCGGG 300
DB 241 TCGAGACCCCGGAGGTCGCAACATCGGTCGATCGGTCGCTGTCGCGGTATGCGCGGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGCGGTGCACCG 360
DB 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGCGGTGCACCG 360
QY 361 ACAGATTCACACTACCTGACCGCGGACGAGAGGACCGCACGTCGTGGCGGCGCAACT 420
DB 361 ACAGATTCACACTACCTGACCGCGGACGAGAGGACCGCACGTCGTGGCGGCGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGCGTTTCGGAGGCGCGGTTGCTGGTCCCGCGCAAGGCGG 480
DB 421 CGCGGATCGACGACAAAGGCGCGTTTCGGAGGCGCGGTTGCTGGTCCCGCGCAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTCGCTTCGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACGTCGCTTCGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCGCAACCGTGCCC 600
DB 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCGCAACCGTGCCC 600
QY 601 TGAATGGCGCCCAACATGACGAGCGCCAGGCGGTTTCGCTGGTGGCGAGGCGCGCTGG 660
DB 601 TGAATGGCGCCCAACATGACGAGCGCCAGGCGGTTTCGCTGGTGGCGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGATGAGGTCGCGCGCGGATGCGCGCGGCGATCGACGCGGCGAGCT 705
DB 661 TGGGCAACCGGATGAGGTCGCGCGCGGATGCGCGCGGCGATCGACGCGGCGAGCT 705

```

RESULT 10

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US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285, 306A
; CURRENT FILING DATE: 1999-04-02

```

RESULT 11

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US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US

```

```

; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

```

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
DB 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTTCGGCACCAGCAGCTGCCAGTTCATGGACCAAGAACACCCGC 120
DB 61 CGATCAAGAGGTTCTTTCGGCACCAGCAGCTGCCAGTTCATGGACCAAGAACACCCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTGCAACCCGCTCCACTACGCGCGGATGTGCCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGACGTGCAACCCGCTCCACTACGCGCGGATGTGCCCGA 240
QY 241 TCGAGACCCCGGAGGTCGCAACATCGGTCGATCGGTCGCTGTCGCGGTATGCGCGGG 300
DB 241 TCGAGACCCCGGAGGTCGCAACATCGGTCGATCGGTCGCTGTCGCGGTATGCGCGGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGCGGTGCACCG 360
DB 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGCGGTGCACCG 360
QY 361 ACAGATTCACACTACCTGACCGCGGACGAGAGGACCGCACGTCGTGGCGGCGCAACT 420
DB 361 ACAGATTCACACTACCTGACCGCGGACGAGAGGACCGCACGTCGTGGCGGCGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGCGTTTCGGAGGCGCGGTTGCTGGTCCCGCGCAAGGCGG 480
DB 421 CGCGGATCGACGACAAAGGCGCGTTTCGGAGGCGCGGTTGCTGGTCCCGCGCAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTCGCTTCGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACGTCGCTTCGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCGCAACCGTGCCC 600
DB 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCGCAACCGTGCCC 600
QY 601 TGAATGGCGCCCAACATGACGAGCGCCAGGCGGTTTCGCTGGTGGCGAGGCGCGCTGG 660
DB 601 TGAATGGCGCCCAACATGACGAGCGCCAGGCGGTTTCGCTGGTGGCGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGATGAGGTCGCGCGCGGATGCGCGCGGCGATCGACGCGGCGAGCT 705
DB 661 TGGGCAACCGGATGAGGTCGCGCGCGGATGCGCGCGGCGATCGACGCGGCGAGCT 705

```

```

; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US

```

```

: CURRENT APPLICATION NUMBER: US/09/285,306A
:
: CURRENT FILING DATE: 1999-04-02
:
: EARLIER APPLICATION NUMBER: US 60/080,616
:
: EARLIER FILING DATE: 1998-04-03
:
: NUMBER OF SEQ ID NOS: 191
:
: SOFTWARE: FastSEQ for Windows Version 3.0
:
: SEQ ID NO 24
:
: LENGTH: 705
:
: TYPE: DNA
:
: ORGANISM: Mycobacterium avium
:
: US-09-285-306-24

```

Query Match	100.0%	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0%;	Pred. No. 8.2e-156;		
Matches 705;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	CCGAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG	60	
Db	1	CCGAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG	60	
Qy	61	CGATCAAGAGAGTTCTTCGGCACACAGCCAGCTGTCCCAAGTTTCATGGACACGAAACAACCCGC	120	
Db	61	CGATCAAGAGAGTTCTTCGGCACACAGCCAGCTGTCCCAAGTTTCATGGACACGAAACAACCCGC	120	
Qy	121	TGTCGGGGCTCACCAACAAGCGCGCTGTGCGCGCTGGGCCGGGTGGTCTGTGCCGG	180	
Db	121	TGTCGGGGCTCACCAACAAGCGCGCTGTGCGCGCTGGGCCGGGTGGTCTGTGCCGG	180	
Qy	181	AGCGGCGCGGCTGGAGGTTCGGGACGTGCACCGTCCACTACGGCCGGATGTGCCCGA	240	
Db	181	AGCGGCGCGGCTGGAGGTTCGGGACGTGCACCGTCCACTACGGCCGGATGTGCCCGA	240	
Qy	241	TCGAGACCCCGGAGGGTCCAAACATCCGTCTGTATCGGCTCGCTGTCGGTGTATGCGCGGG	300	
Db	241	TCGAGACCCCGGAGGGTCCAAACATCCGTCTGTATCGGCTCGCTGTCGGTGTATGCGCGGG	300	
Qy	301	TCAACCCGTTTCGGGTTTCATCGAGACGCCGTCACGCAAGGTGGTCGACGGCGTGGTCAACG	360	
Db	301	TCAACCCGTTTCGGGTTTCATCGAGACGCCGTCACGCAAGGTGGTCGACGGCGTGGTCAACG	360	
Qy	361	ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACGTGGTGGCCAGCCCAACT	420	
Db	361	ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACGTGGTGGCCAGCCCAACT	420	
Qy	421	CGCCGATTCGACGACAAAGGGCCGGTTTCGCGGAGGCCCGGGTGCCTGGTCCGCGCAAGCGG	480	
Db	421	CGCCGATTCGACGACAAAGGGCCGGTTTCGCGGAGGCCCGGGTGCCTGGTCCGCGCAAGCGG	480	
Qy	481	GCAGGTCGAGTACGTGCCCTTCGTCCGAGGTGACTACATGACAGTGTCCGCCGCGCAGA	540	
Db	481	GCAGGTCGAGTACGTGCCCTTCGTCCGAGGTGACTACATGACAGTGTCCGCCGCGCAGA	540	
Qy	541	TGCTGTCTGGTGGCCACCGCATGATCCCGTTCTTCGAGCAGCAGCGCCCAACCGTCCCC	600	
Db	541	TGCTGTCTGGTGGCCACCGCATGATCCCGTTCTTCGAGCAGCAGCGCCCAACCGTCCCC	600	
Qy	601	TGATGGCGGCCAAACATGCACGCGCAGCGGTTTCGGTGGTGGCAGCGAGCGCCCGCTGG	660	
Db	601	TGATGGCGGCCAAACATGCACGCGCAGCGGTTTCGGTGGTGGCAGCGAGCGCCCGCTGG	660	
Qy	661	TGGGCAACCGCATGGAGCTCGCGCGCGCATCGACGCGCGACGT	705	
Db	661	TGGGCAACCGCATGGAGCTCGCGCGCGCATCGACGCGCGACGT	705	

RESULT 12  
US-09-285-306-17  
; Sequence 17, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.

```

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

```

Query Match			
Best Local Similarity 99.8%; Score 703.4; DB 9; Length 705;			
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;			
Qy	1	CCCAGACGCTGGAGGCGATCAACACGACGACCCCTGATCAACATCCGTCGAGTCGTCGGCGG	60
Db	1	CCCAGACGCTGGAGGCGATCAACCCGACACCCCTGATCAACATCCGTCGAGTCGTCGGCGG	60
Qy	61	CGATCAAGGAGTTCCTTCGGCACAACGACGAGCTGTCCAGTTCATGGACACAGAACACCCCG	120
Db	61	CGATCAAGGAGTTCCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACACAGAACACCCCG	120
Qy	121	TGTCGGGCTCAACCCAAAGCCGCGCTGTCCGCGCTGGCGCGGGTGCTGTGTCCCGG	180
Db	121	TGTCGGGCTCAACCCAAAGCCGCGCTGTCCGCGCTGGCGCGGGTGCTGTGTCCCGG	180
Qy	181	AGCGGCGCGGCTGGAGGTCGCGGAGCTGCACCCGTCGCCACTACAGGCGCGATGTCGCCA	240
Db	181	AGCGGCGCGGCTGGAGGTCGCGGAGCTGCACCCGTCGCCACTACAGGCGCGATGTCGCCA	240
Qy	241	TCGAGACCCCGGAGGGTCCAAACATCCGCTCTGATCCGCTCGCTGTCCGCTGTATGCGCGG	300
Db	241	TCGAGACCCCGGAGGGTCCAAACATCGGCTCTGATCCGCTCGCTGTATGCGCGG	300
Qy	301	TCAACCCGTTCCGGTTATCGAGACGCCCTGACCGAAGGTGTCGACGCGCGTGTCAACCG	360
Db	301	TCAACCCGTTCCGGTTATCGAGACGCCCTGACCGAAGGTGTCGACGCGCGTGTCAACCG	360
Qy	361	ACGAGATCCACTACCTAGCCGCGGACGAGGAGACCGCACGTTGGTGCGGACGACCACT	420
Db	361	ACGAGATCCACTACCTAGCCGCGGACGAGGAGACCGCACGTTGGTGCGGACGACCACT	420
Qy	421	CGCCGATCGACACAAAGGCGCGGTTCCGCGAGGCGCCGGTGCTGGTCCGCCGCAAGCGG	480
Db	421	CGCCGATCGACACAAAGGCGCGGTTCCGCGAGGCGCCGGTGCTGGTCCGCCGCAAGCGG	480
Qy	481	GGAGGTCGAGTACGTGCCCTCTGTCGAGGTTGGAATACATGACAGTGTCCGCGCGCAGA	540
Db	481	GGAGGTCGAGTACGTGCCCTCTGTCGAGGTTGGAATACATGACAGTGTCCGCGCGCAGA	540
Qy	541	TGGTGTCGTTGGCCACCGCGATATCCCGTTCTTCGAGCACGACGACCAACCGTGC	600
Db	541	TGGTGTCGTTGGCCACCGCGATATCCCGTTCTTCGAGCACGACGACCAACCGTGC	600
Qy	601	TGATGGGCGCCAAATGACAGCCAGGCGGTTCCGCTGGTGCGCAGCAGGCGCGCTGG	660
Db	601	TGATGGGCGCCAAATGACAGCCAGGCGGTTCCGCTGGTGCGCAGCAGGCGCGCTGG	660
Qy	661	TGGGCAACCGGATGAGAGTTCGCGCGGCGATCGACGCGGCGACGT	705
Db	661	TGGGCAACCGGATGAGAGTTCGCGCGGCGATCGACGCGGCGACGT	705

RESULT 13  
US-09-285-306-3  
; Sequence 3, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Ginceras, Thomas

```

; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGGATCACACCGAGACCCCTGATCAACATCCCTCCAGTCTGGCGG 60
DB 1 CCAGAGCTGGAGGGATCACACCGAGACCCCTGATCAACATCCCTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTCTTCCGACACGACGAGCTGCCAGTTCATGGACCAACACCCGC 120
DB 61 CGATCAAGGAGTCTTCCGACACGACGAGCTGCCAGTTCATGGACCAACACCCGC 120
QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGGCTGGGCGCGGTGGTCTGTCCGGG 180
DB 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGGCTGGGCGCGGTGGTCTGTCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGGGATCCGACCCGTCCTGATCCAGTTCATGGACCAACACCCGC 240
DB 181 AGCGGCGCGGCTGGAGGTCGGGATCCGACCCGTCCTGATCCAGTTCATGGACCAACACCCGC 240
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGCTGATCGGCTCTCATCGGCTCGCTGTCCGGG 300
DB 241 TCAGAGACCCCGAGGGTCCCAACATCGCTGATCGGCTCTCATCGGCTCGCTGTCCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTTGGTTCGACGGGTTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTTGGTTCGACGGGTTGTCACCG 360
QY 361 ACAGATTCACCTGACCGCGAGAGAGACCGGACCGCTGCTGGTGGCGAGGCGCAACT 420
DB 361 ACAGATTCACCTGACCGCGAGAGAGACCGGACCGCTGCTGGTGGCGAGGCGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGGTTCCGAGAGCCCGGTTCCGAGGCGCGGTCGCTGGTGG 480
DB 421 CGCGGATCGACGACAAAGGCGGTTCCGAGAGCCCGGTTCCGAGGCGCGGTCGCTGGTGG 480
QY 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGACATGACGACGTCGCTGGTGGCGAGG 540
DB 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGACATGACGACGTCGCTGGTGGCGAGG 540
QY 541 TGTGTGCTGGGCGACCGCGATGATCCCGTTCTCGAGACGACGACGACCGGTCGCC 600
DB 541 TGTGTGCTGGGCGACCGCGATGATCCCGTTCTCGAGACGACGACGACCGGTCGCC 600
QY 601 TGATGGGCGCAACATGACGACGCGGTCGCTGGTGGCGAGGCGCGCTGG 660
DB 601 TGATGGGCGCAACATGACGACGCGGTCGCTGGTGGCGAGGCGCGCTGG 660
QY 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705

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DB 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGGATCACACCGAGACCCCTGATCAACATCCCTCCAGTCTGGCGG 60
DB 1 CCAGAGCTGGAGGGATCACACCGAGACCCCTGATCAACATCCCTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTCTTCCGACACGACGAGCTGCCAGTTCATGGACCAACACCCGC 120
DB 61 CGATCAAGGAGTCTTCCGACACGACGAGCTGCCAGTTCATGGACCAACACCCGC 120
QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGGCTGGGCGCGGTGGTCTGTCCGGG 180
DB 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGGCTGGGCGCGGTGGTCTGTCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGGGATCCGACCCGTCCTGATCCAGTTCATGGACCAACACCCGC 240
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QY 241 TCAGAGACCCCGAGGGTCCCAACATCGGCTCTCATCGGCTCGCTGTCCGGG 300
DB 241 TCAGAGACCCCGAGGGTCCCAACATCGGCTCTCATCGGCTCGCTGTCCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTTGGTTCGACGGGTTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTTGGTTCGACGGGTTGTCACCG 360
QY 361 ACAGATTCACCTGACCGCGAGAGAGACCGGACCGCTGCTGGTGGCGAGGCGCAACT 420
DB 361 ACAGATTCACCTGACCGCGAGAGAGACCGGACCGCTGCTGGTGGCGAGGCGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGGTTCCGAGAGCCCGGTTCCGAGGCGCGGTCGCTGGTGG 480
DB 421 CGCGGATCGACGACAAAGGCGGTTCCGAGAGCCCGGTTCCGAGGCGCGGTCGCTGGTGG 480
QY 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGACATGACGACGTCGCTGGTGGCGAGG 540
DB 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGACATGACGACGTCGCTGGTGGCGAGG 540

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QY 541 TGGTGTGGTGGCCACCGGATGATCCCGTTCTCGAGCAGCAGCGCCAAACCGTGGCC 600  
 Db 541 TGGTGTGGTGGCCACCGGATGATCCCGTTCTCGAGCAGCAGCGCCAAACCGTGGCC 600  
 QY 601 TGATGGGGCCCAACATGACGCGCAGCGGTTCCGCTGGTGGCAGCGAGCGCCCGCTGG 660  
 Db 601 TGATGGGGCCCAACATGACGCGCAGCGGTTCCGCTGGTGGCAGCGAGCGCCCGCTGG 660  
 QY 661 TGGGCAACCGGCATGAGAGTGGCGCGCGGCATGACACGCGGCGAGCT 705  
 Db 661 TGGGCAACCGGCATGAGAGTGGCGCGCGGCATGACACGCGGCGAGCT 705

RESULT 15

US-09-285-306-10  
 ; Sequence 10, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gengeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 10  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;  
 Best Local Similarity 98.0%; Pred. No. 1.6e-152;  
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;  
 QY 1 CCCAGGACGTGGAGGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTCGGCGG 60  
 Db 1 CCCAGGACGTGGAGGGCGATCACACCGCAGACCCCTGATCAACATCCGTCGRTGTCGGCGG 60  
 QY 61 CGATCAAGGAGTTCTTTCGGCACCCAGCCAGCGTGTCCAGTTTCATGGACAGAAACCCCGC 120  
 Db 61 CGATCAAGGAGTTCTTTCGGCACCCAGCCAGCGTGTCCAGTTTCATGGACAGAAACCCCGC 120  
 QY 121 TGTGGGGCTCACCCACAGCGCGCTGTTCGGCGCTGGCGCGGTGCTGTCTCCCGGG 180  
 Db 121 TGTGGGGCTTCAGCCCAAGCGCGCTGTTCGGCGCTGGCGCGGTGCTGTCTCCCGGG 180  
 QY 181 AGCGGGCCGGGCTGGAGGTCCGCGAGTGCACCCGTCACACTACCGCGCGATGTGCCCGA 240  
 Db 181 AGCGGGCCGGCTGGAGGTCCGCGAGTGCACCCGTCACACTACCGCGCGATGTGCCCGA 240  
 QY 241 TCAGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGTTATGCGCGGG 300  
 Db 241 TCAGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGTTATGCGCGGG 300  
 QY 301 TCAACCGGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTCGACGCGGTGTCACCG 360  
 Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGTCGACGCGGTGTCACCG 360  
 QY 361 ACAGATCCACTACCTGACCGCGCAGCAGGAGACCGCCACGTCGTCGGCGAGGCCAACT 420  
 Db 361 ACAGATCCACTACCTGACCGCGCAGCAGGAGACCGCCACGTCGTCGGCGAGGCCAACT 420  
 QY 421 CGCCGATCGACGACAAAGGGCCGGTTCGCGAGGCCCGGGTGTGTTCCGCGCAAGCGG 480  
 Db 421 CGCCGATCGACGACAAAGGGCCGGTTCGAGGAGKCCCGGGTGTGTTCCGCGCAAGCGG 480  
 QY 481 GCGAGTTCGAGTACGTGCTCGCTCGAGGTGAGTACATGAGACGTGTCCGCGCCAGA 540

Db 481 GCGAGTTCGAGTACGTGCTCGCTCGAGGTGAGTACATGAGACGTGTCCGCGCCAGA 540  
 QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGCCAAACCGTGGCC 600  
 Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGCCAAACCGTGGCC 600  
 QY 601 TGATGGGGCCCAACATGACGCGCAGCGGTTCCGCTGGTGGCAGCGAGCGCCCGCTGG 660  
 Db 601 TGATGGGGCCCAACATGACGCGCAGCGGTTCCGCTGGTGGCAGCGAGCGCCCGCTGG 660  
 QY 661 TGGGCAACCGGCATGAGAGTGGCGCGCGGCATGACACGCGGCGAGCT 705  
 Db 661 TGGGCAACCGGCATGAGAGTGGCGCGCGGCATGACACGCGGCGAGCT 705

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 Job time : 452.661 secs

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GenCore version 5.1.6  
Copyright (C) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds  
(without alignments)  
11150.034 Million cell updates/sec

Title: US-09-285-306-10

Perfect score: 705

Sequence: 1 cccagagctgagcgatc.....ggcgatcgacggcgacgt 705

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:\*

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- 2: /cgn2\_6/prodata/1/ina/5B\_COMB.seq:\*
- 3: /cgn2\_6/prodata/1/ina/6A\_COMB.seq:\*
- 4: /cgn2\_6/prodata/1/ina/6B\_COMB.seq:\*
- 5: /cgn2\_6/prodata/1/ina/PTUS\_COMB.seq:\*
- 6: /cgn2\_6/prodata/1/ina/backfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	606.6	86.0	706	3	US-08-797-812-24
2	599	85.0	4403765	3	US-09-103-840A-2
3	599	85.0	4411529	3	US-09-103-840A-1
4	563.8	80.0	3447	2	US-08-313-185-57
5	563.8	80.0	3447	2	US-09-082-614A-57
6	536.4	76.1	970	1	US-08-250-030-1
7	536.4	76.1	970	5	PCT-US95-06790-1
8	526.4	74.7	620	2	US-08-757-653-135
9	526.4	74.7	620	2	US-08-757-653-138
10	526.4	74.7	620	3	US-08-520-946-135
11	526.4	74.7	620	3	US-08-520-946-138
12	526.4	74.7	620	4	US-09-655-378A-135
13	526.4	74.7	620	4	US-09-655-378A-138
14	524.8	74.4	620	2	US-08-757-653-136
15	524.8	74.4	620	2	US-08-757-653-137
16	524.8	74.4	620	2	US-08-757-653-139
17	524.8	74.4	620	2	US-08-757-653-140
18	524.8	74.4	620	3	US-08-520-946-136
19	524.8	74.4	620	3	US-08-520-946-137
20	524.8	74.4	620	3	US-08-520-946-139
21	524.8	74.4	620	3	US-08-520-946-140
22	524.8	74.4	620	4	US-09-655-378A-136
23	524.8	74.4	620	4	US-09-655-378A-137
24	524.8	74.4	620	4	US-09-655-378A-139
25	524.8	74.4	620	4	US-09-655-378A-140
26	460.6	65.3	706	3	US-08-797-812-25
27	415.8	59.0	5099	4	US-09-887-052-1

28	414.2	58.8	5099	4	US-09-887-052-3	Sequence 3, Appli
29	414.2	58.8	5099	4	US-09-887-052-5	Sequence 5, Appli
30	396.8	56.3	4227	4	US-09-902-540-8919	Sequence 8919, Ap
31	396.8	56.3	9367	4	US-09-902-540-951	Sequence 951, App
32	373.2	52.9	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	373.2	52.9	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	338	47.9	4083	4	US-09-489-039A-22	Sequence 22, Appl
35	338	47.9	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	291.8	41.4	432	2	US-08-313-185-59	Sequence 59, Appl
37	291.8	41.4	432	3	US-09-082-614A-59	Sequence 59, Appl
38	279	39.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	279	39.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
41	264	37.4	2964	4	US-09-540-236-1097	Sequence 1097, Ap
42	264	37.4	31063	4	US-09-596-002-20	Sequence 20, Appl
43	250.8	35.6	1830121	4	US-09-557-884-1	Sequence 1, Appli
44	250.8	35.6	1830121	4	US-09-643-990A-1	Sequence 1, Appli
45	250.4	35.5	319	3	US-08-750-088A-35	Sequence 35, Appl

#### ALIGNMENTS

#### RESULT 1

US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111

#### COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/797,812  
FILING DATE: 07-FEB-1997  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/017,765  
FILING DATE: 15-MAY-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/629,031  
FILING DATE: 08-APR-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/012,631  
FILING DATE: 01-MAR-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/011,339  
FILING DATE: 08-FEB-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Fitts, Renee A.  
REGISTRATION NUMBER: 35,136  
REFERENCE/DOCKET NUMBER: 16528X-018550  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-326-2400  
TELEFAX: 415-326-2422

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; INFORMATION FOR SEQ ID NO: 24:
;
; SEQUENCE CHARACTERISTICS:
;     LENGTH: 706 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;     MOLECULE TYPE: cDNA
US-08-797-812-24

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Query Match	86.0%;	Score 506.6;	DB 3;	Length 706;
Best Local Similarity	90.6%;	Pred. No. 3.5e-117;		
Matches 639;	Conservative 6;	Mismatches 60;	Indels 0;	Gaps 0;
Qy	1	CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCRCGTGCTGGCGG	60	
Db	2	CCCAGGACGTGGAGGCGATCACACCGCAGACCTTGTATCAACATCGGCCGCTGGTCGCCG	61	
Qy	61	CGATCAAGGAGTTCTTCGGCACCCAGCCAGCTGTCCCAATTCATGGAACAGAACCCCGC	120	
Db	62	CGATCAAGGAGTTCTTCGGCACCCAGCCAGCTGAGCCAATTCATGGAACAGAACCCCGC	121	
Qy	121	TGTCGGGTCTGAACCCACAAGGCGCGCTGTGCGGCGCTGGGCGCCGGGTGTTCTGCCGGG	180	
Db	122	TGTCCGGGTTGACCCACAAGCGCGCACTGTCCGGCGCTGGGCGCCGGGTCTGTCACTG	181	
Qy	181	AGCGGCGCGCTGAGGTCGGTACGCTGCAACCGTCSCACTACGGCCGATGTCGCCGA	240	
Db	182	AGCGTGCCGGCTGGAGTCCGACACGTGCAACCGTCSCACTACGGCCGATGTCGCCGA	241	
Qy	241	TCGAGACCCCGGAGGGTCCCAAATCGGTCTGTATCGGCTCGCTGTGCTGTATGTCGCGGG	300	
Db	242	TCGNAACCCCTGAGGGGCCAAATCGGTCTGTATCGGCTCGCTGTGCTGTATGTCGCGGG	301	
Qy	301	TSAAACCGTTTCGGGTTTCATCGAGACCCGCTACCGCAAGTGGTTCGACGTTGTGTACCG	360	
Db	302	TCAAACCGTTTCGGGTTTCATCGAAACCGCTACCGCAAGTGGTTCGACGCGCTGGTTAGCG	361	
Qy	361	ACGAGATCCACTACTCTGACCCCGACGAGGAGGACCGCCACGTGTCGTCGCGCAGGCCACT	420	
Db	362	ACGAGATTCGTGTACTCTGACCCCGACGAGGAGGACCGCCACGTGTCGTCGTCGACAGGCCAA	421	
Qy	421	CGCCGATCGACACAAAGGGCCGGTTTCAGAGGAGKCCCGGGTCTGTCTCGCCGCSAAGGCGG	480	
Db	422	CGCCGATCGATCGGACCGTTCGTTTCGTCGAGCCGCGGTGCTGGTTCGCGCCGACGAGGG	481	
Qy	481	GCGAGGTCGAGTACGTGCCCTTCGTCGAGGTGGACTACATGGAACGTGTGCGCGCGCCAGA	540	
Db	482	GCGAGGTCGAGTACGTGCCCTTCGTCGAGGTGGACTACATGGAACGTGTGCGCGCGCCAGA	541	
Qy	541	TGGTGTTCGGTGGCCACCGCATGATCCCGTTTCCTCGAGCAGACGACGCCAACCGTGC	600	
Db	542	TGGTGTTCGGTGGCCACCGCATGATCCCTTCCTTCGAGCAACGACGACGCCAACCGTGC	601	
Qy	601	TGATGGGCGCCAAATGTCAGGCGCCAGGCGGTTTCGCTGTCGACGAGGCGCGCTGG	660	
Db	602	TCATGGGGGCAAAATGTCAGGCGCCAGGCGGTCGCTGCTCGGTAGCAGAGGCCCGCTGG	661	
Qy	661	TGGGCACCGCATGAGTGTGCGCGCGCATTCGACGCGCGCACGT	705	
Db	662	TGGGCACCGGATGAGCTGTGCGCGCGCATTCGACGCGCGCGACGT	706	

RESULT 2  
US-09-103-840A-2  
; Sequence 2, Application US/09103840A  
; Patent No. 6294328  
; GENERAL INFORMATION:  
; APPLICANT: FLEISCHMAN, Robert D.  
; APPLICANT: WHITE, Owen R.  
; APPLICANT: FRASER, Claire M.  
; APPLICANT: VENTER, John C.  
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM  
; TITLE OF INVENTION: TUBERCULOSIS

```

; FILE REFERENCE: 24366-20007_00
; CURRENT APPLICATION NUMBER: US/09/103_840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

Query Match      85.0%; Score 599; DB 3; Length 4403765;
Best Local Similarity 90.4%; Pred. No. 3.7e-115;
Matches 632; Conservative 6; Mismatches 61; Indels 0; Gaps 0;

QY      1  CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCRCGTCCGTGGCGG 60
DB      2  CCCAGGACGTGGAGGCGATCACCGCAGACCGTGTGATCAACATCCGCGCGGTGGTCGCG 763022

QY      61  CGATCAAGAGTTCTTCGGCACCGACGAGCGTGTCCAGTTTCATGGACAGAAACACCGCG 120
DB      2  CGATCAAGAGTTCTTCGGCACCGACGAGCGTGTGAGCCAAATTCATGGACAGAAACACCGCG 763082

QY      121  TGTCCGGTCTGACCCACAAGCGCGCTGTTCGGCGCTGGGCCCGGGGTGCTGTGCCGGG 180
DB      2  TGTCCGGTCTGACCCACAAGCGCGCTGTTCGGCGCTGGGGCCCGGGGTCTGTACGTG 763142

QY      181  AGCGGGCCGCGCTTGGAGGTTCGTGACGTGCAACCGCTGCACTACGGCCGGATGTGCCGA 240
DB      2  AGCGTCCGCGCTGGAGGTTCGGGACGTGCAACCGCTGCACTACGGCCGGATGTGCCGA 763202

QY      241  TCAGAGACCCCGAGGGTCCAAATTCGTCTGATCGGCTCGCTGTCCGTGTAYCGCGGG 300
DB      2  TCAGAACCCCTCGAGGGGCCCAATTCGTCTGATCGGCTCGCTGTCCGTGTACGCGCGGG 763262

QY      301  TSAACCGGTTCCGGTTCATCGAGACCCCGCTACCGCAAGGTGGTGCAGCGTGTGTCACCG 360
DB      2  TCACCCGTTCCGGTTCATCGAACCGCGTACCGCAAGGTGGTGCAGCGCGTGTGTTAGCG 763322

QY      361  ACAGATTCATCTTACCTGACCCCGCACGAGAGAGACCGCCACGTSGTGGCGCAGGCCAACT 420
DB      2  ACAGATTCGTGTACTCTGACCCCGCACGAGAGAGACCGCCACGTSGTGGCACAGGCCAAAT 763382

QY      421  CGCGATCGACGACGAAGCGCGCGTTTCAGAGAGKCCCGGGTCTCGTCCGCGSAAAGCGG 480
DB      2  CGCGATTCGATCGGACGTCGCTTCGTTCGAGCCCGCGGTGCTCGTCCGCGCAGAGGGG 763442

QY      481  GCGAGTTCGAGTACGTCCCTCGTCCGAGTGGACTACATGGACGTTTCGCGCGGCCACAGA 540
DB      2  GCGAGTTCGAGTACGTCCCTCGTCCGAGTGGACTACATGGACGTTTCGCGCGGCCACAGA 763502

QY      541  TGGTGTGGTGGCCACCGCATGATCCCGTTCCTCGAGACGACGAGCGCCAAACGTCGCC 600
DB      2  TGGTGTGGTGGCCACCGCATGATCCCTTCCTCGAGACGACGAGCGCCAAACGTCGCC 763562

QY      601  TGATGGCGGCCAAATCATCGAGCGCCAGGCGGTTCCGCTGGTTCGCGCAGCGAGCGCGCTGG 660
DB      2  TCATGGCGGCCAAATCATCGAGCGCCAGGCGGTTCCGCTGGTTCGTTAGCGAGCGCGCTGG 763622

QY      661  TGGGCAACCGCATGAGCTGTCGCGCGCGGATTCGACGCGG 699
DB      2  TGGGCAACCGGATGAGCTGTCGCGCGCGGATTCGACGCGG 763661

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RESULT 3  
US-09-103-840A-1  
; Sequence 1, Application US/09103840A  
; Patent No. 6294328  
; GENERAL INFORMATION:



:	APPLICANT:	FLEISCHMAN, Robert D.			
:	APPLICANT:	WHITE, Owen R.			
:	APPLICANT:	FRASER, Claire M.			
:	APPLICANT:	VENTER, John C.			
:	TITLE OF INVENTION:	DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM			
:	TITLE OF INVENTION:	TUBERCULOSIS			
:	FILE REFERENCE:	24366-20007.00			
:	CURRENT APPLICATION NUMBER:	US/09/103,840A			
:	CURRENT FILING DATE:	1998-06-24			
:	NUMBER OF SEQ ID NOS:	2			
:	SOFTWARE:	PatentIn Ver. 2.1			
:	SEQ ID NO 1				
:	LENGTH:	4411529			
:	TYPE:	DNA			
:	ORGANISM:	Mycobacterium tuberculosis			
:	OTHER INFORMATION:	H37RV			
:	US-09-103-840A-1				
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	Query Match	85.0%;	Score 599;	DB 3;	Length 4411529;
	Best Local Similarity	90.4%;	Pred. No. 3.7e-115;		
	Matches 632;	Conservative 6;	Mismatches 61;	Indels 0;	Gaps 0;
<hr/>					
Qy	1	CCCAGGACGTGGAGCGCATCACCGCAGACCCTGATCAACATCCGTCCRGTCGTGGCGG	60		
Dd	761003	CCCAGGACGTGGAGCGCATCACCGCAGAGCTTGATCAACATCCGCCGCTGGTGC	60		
<hr/>					
Qy	61	CGATCAAGGAGTTCTTCCGACACCAGCAGCTGTCCAGTTTCATGACACGAACAACCCGC	120		
Dd	761063	CGATCAAGGAGTTCTTCCGACACCAGCAGCTGAGCCAATTCATTGACACGAACAACCCGC	120		
<hr/>					
Qy	121	TGTCGGGTCTCACCCAAAGCGCCGCTGTCCGCGCTCGGCCCGCGGTGTCTGTCCCCGG	180		
Dd	761123	TGTCGGGTTCACCCAAAGCGCCGACTGTCCGCGCTCGGCCCGCGGTGTCTGTCACTG	180		
<hr/>					
Qy	181	AGCGGCGCGCTTGAGGTCCGTGACGTGCACCCGCTCSACTACGCCCGGATGTCCCGGA	240		
Dd	761183	AGCGTGCGCGCTGAGGTCCGCGACGTGCACCCGCTCGACTACGCCCGGATGTCCCGGA	240		
<hr/>					
Qy	241	TCGAGACCCCGAGGGTCCCAACATCCGTCTGATCGGCTCGCTGTCGGTGTAYGCGCGG	300		
Dd	761243	TCGAACCCCTTGAGGGGCCAACATCCGTCTGATCGGCTCGCTGTCGGTGTACGCGCGG	300		
<hr/>					
Qy	301	TSAAACCGCTTCGGGTTCATCGAGACCCCGTACCGCAAGTGSTTCGACGTTGTGTCACCG	360		
Dd	761303	TCAAACCGCTTCGGGTTCATCGAAGCGCTACCGCAAGTGSTTCGACGTTGTGTCACCG	360		
<hr/>					
Qy	361	ACGAGATTCCTACTCTGACCCCGACGAGGAGGACCGCCACGTSTGTGGCGAGGCCAAT	420		
Dd	761363	ACGAGATCTGTGTA CTGTAACCCCGACGAGGAGGACCGCCACGTSTGTGGCGAGGCCAAT	420		
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Qy	421	CGCCGATCGACGACAAGGGCCGTTTCGAGGAGKCCCGGTGTCTGTCGCCGSAAGGCGG	480		
Dd	761423	CGCCGATCGATCGGACGGTTCGTCGTCGAGCCGCGGTCTGTCGCCGSAAGGCGG	480		
<hr/>					
Qy	481	GCAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGSACTGTTCGCCGCCACAGA	540		
Dd	761483	GCAGGTCGAGTACGTGCCCTCGTCTGAGGTGGACTACATGSACTGTTCGCCGCCACAGA	540		
<hr/>					
Qy	541	TGTTGTGCGTGCCACCCGATGATCCCGTTCTTCGAGCAGACGACGACCAACCGTGCC	600		
Dd	761543	TGTTGTGCGTGCCACCCGATGATTCCTTCCTTGAGACGACGACGACCAACCGTGCC	600		
<hr/>					
Qy	601	TGATGGGCGCAACATGACGCGCCAGGCGGTTCCGCTGTTGCGAGCGAGGCGCGCTGG	660		
Dd	761603	TCATGGGCGCAACATGACGCGCCAGGCGGTTCCGCTGTTGCGAGCGAGGCGCGCTGG	660		
<hr/>					
Qy	661	TGGGACCGGCATGAGGTGCGCGCGCGATCGACGCGG	699		
Dd	761663	TGGGACCGGCATGAGGTGCGCGCGCGATCGACGCGG	761701		

## RESULT 4

US-08-313-185-57

```

; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: In Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

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Query Match	80.0%	Score 563.8	DB 2	Length 3447
Best Local Similarity	87.3%	Pred. No. 3.2e+108		
Matches 610	Conservative 6	Mismatches 83	Indels 0	Gaps 0
Qy 1	CCCAGACGTCGGAGGCGATCACACCCGAGACCCCTGATCAATCCGTCGTCGTCGTCGCGG 60			
Db 1124	CCCAGACGTCGGAGGCGATCACCCGCGAGCGTGTATCAATATCCGTCGCGTGGTCGCGG 1183			
Qy 61	CGATCAAGGAGTCTTTCGGCACCCAGCGAGCTGTCCAGATTCATGGACCGAACAACCCCGC 120			
Db 1184	CTATCAAGGATTCCTTCGGCACCCAGCGAGCTGTCCAGATTCATGGATCATGAACAACCCCTC 1243			
Qy 121	TGTCGGGTCTGACCCACAAGCGCGCGCTGTGCGCGTGTGGCCCGCGGTGGTCTGTCCCGGG 180			
Db 1244	TGTCGGGCGCTGACCCACAAGCGCGCGGTGTGCGCGCTGTGGCCCGCGGTGGTCTGTCCGCGT 1303			
Qy 181	AGCGGCGCGGCTTGGAGGTCCGTGACGTGCACCCGCTSCACTAGCGCCGCGATGTGCCGA 240			
Db 1304	AGCGTCGCGGGCTTAGAGGTCCGTGACGTGCACCCCTTCGCACACTAGCGCCGCGATGTGCCGA 1363			
Qy 241	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGTGATCGGCTCGCTGTGTCGGTGTATGCGCGGG 300			
Db 1364	TCGAGACTCCGAGGGCCCGCAACATAGGTCTGTATCGGTTCATTGTCCGTGTATCGCGGGG 1423			
Qy 301	TSAACCCGTTTCGGTTCATTCGACACCCCGTACCGCAAGGTGGTTCGACGTTGTGGTCAACG 360			
Db 1424	TCAACCCCTTCGGGTTTCATCGAAACACCGTACCGCAAGTGGTTCGATCGGTGGTTCAGCG 1483			



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; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-3061
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.1%; Score 536.4; DB 1; Length 970;
Best Local Similarity 90.0%; Pred. No. 1.4e-102;
Matches 567; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACGCGACACCTGATCAACATCCGTCCCGTGGCGG 60
DB 341 CCCAGACGTGGAGGCGATCACACGCGACACCTGATCAACATCCGTCCCGTGGCGG 400

QY 61 CGATCAAGGAGTCTTTCGGCACCGACCTGTCCTGATGACCAAGCAACACCCGC 120
DB 401 CGATCAAGGAGTCTTTCGGCACCGACCTGATGACCAAGCAACACCCGC 460

QY 121 TGTGGGTCTGACCCACAAGCGCCCTGTGCGCGCTGGGCGGCTGTGTCTGTCCGGG 180
DB 461 TGTGGGTCTGACCCACAAGCGCCCTGTGCGCGCTGGGCGGCTGTGTCTGTCCGGG 520

QY 181 AGCGGGCGGCTGGAGGTCCTGAGTGCACCGTGCACCTACCGCGGATGTCGCGA 240
DB 521 AGCGTCCGGCTGGAGGAGCGAGCTGACCGTGCACCTACCGCGGATGTCGCGA 580

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
DB 581 TCGAACCCTTGGGGGCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 640

QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGTGTGTGTGTGTGTGTGTGT 360
DB 641 TCAACCCGTTCCGGTTCATCGAAGCGCGTACCGCAAGTGTGTGTGTGTGTGTGTGT 700

QY 361 ACGAGATCCACTACTGACCGCGGAGGAGCGGACCGCAACTGTGTGTGTGTGTGTGTGT 420
DB 701 ACGAGATCCACTACTGACCGCGGAGGAGCGGACCGCAACTGTGTGTGTGTGTGTGTGT 760

QY 421 CGCCGATCGACGACAAAGGCGCGGTTCGAGGAGKCCCGGCTGCTGTGCTCCCGCAAGGCGG 480
DB 761 CGCCGATCGATCGGAGCGTTCGCTGTCGAGCGCGCGTGTGTGTGCTCCCGCAAGGCGG 820

QY 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATTACATGACGCTGTGCGCGCGCGAGA 540
DB 821 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATTACATGACGCTGTGCGCGCGCGAGA 880

QY 541 TGGTGTGCTGCGTCCCGGATGATCCCGTTCTCGAGCACCGACCGCAACTGTGTGTGTGT 600
DB 881 TGGTGTGCTGCGTCCCGGATGATCCCGTTCTCGAGCACCGACCGCAACTGTGTGTGTGT 940

QY 601 TGATGGGCGCCCAACATGACGAGCGCGAGCGG 630
DB 941 TCATGGGCGCCCAACATGACGAGCGCGAGCGG 970
```

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RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: Mayo Foundation for Medical Education and Research
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1
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Query Match 76.1%; Score 536.4; DB 5; Length 970;  
Best Local Similarity 90.0%; Pred. No. 1.4e-102;  
Matches 567; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

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QY 1 CCCAGACGTGGAGGCGATCACACGCGACACCTGATCAACATCCGTCCCGTGGCGG 60
DB 341 CCCAGACGTGGAGGCGATCACACGCGACACCTGATCAACATCCGTCCCGTGGCGG 400

QY 61 CGATCAAGGAGTCTTTCGGCACCGACCTGTCCTGATGACCAAGCAACACCCGC 120
DB 401 CGATCAAGGAGTCTTTCGGCACCGACCTGATGACCAAGCAACACCCGC 460

QY 121 TGTGGGTCTGACCCACAAGCGCCCTGTGCGCGCTGGGCGGCTGTGTCTGTCCGGG 180
DB 461 TGTGGGTCTGACCCACAAGCGCCCTGTGCGCGCTGGGCGGCTGTGTCTGTCCGGG 520

QY 181 AGCGGGCGGCTGGAGGTCCTGAGTGCACCGTGCACCTACCGCGGATGTCGCGA 240
DB 521 AGCGTCCGGCTGGAGGAGCGAGCTGACCGTGCACCTACCGCGGATGTCGCGA 580

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
DB 581 TCGAACCCTTGGGGGCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 640

QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGTGTGTGTGTGTGTGTGTGT 360
DB 641 TCAACCCGTTCCGGTTCATCGAAGCGCGTACCGCAAGTGTGTGTGTGTGTGTGTGT 700

QY 361 ACGAGATCCACTACTGACCGCGGAGGAGCGGACCGCAACTGTGTGTGTGTGTGTGTGT 420
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Db 701 ACGAGATCGTGTACTGACCGCCGACGAGGAGGACCGCCACGTCGTGTGACGAGGCCAATT 760  
Qy 421 CQCCGATCGACGACAAAGGCGCGGTTTCGAGGAGKCCCGGGTCTGTCTCGCGCGSAAAGGCGG 480  
Db 761 CGCCGATCGATGCGGACCGTGTCTGTCTGAGCCCGCGTCTGTCTGCGCCGCAAGGCGG 820  
Qy 481 GCGAGGTGAGTGTGTCCTGTCCTGTCGAGGTGGAATACATGGAACGTGTGCGCGGCCAGA 540  
Db 821 GCGAGGTGAGTGTGTCCTGTCCTGTCGAGGTGGAATACATGGAACGTGTGCGCGGCCAGA 880  
Qy 541 TGGTGTTCGTTGGCCACCGCGATGATCCGTTTCCTGAGACAGACGACCGCAACCGTGCCC 600  
Db 881 TGGTGTTCGTTGGCCACCGCGATGATTCCTTCTGAGACAGACGACCGCAACCGTGCCC 940  
Qy 601 TGATGGGCGCCAAATGACGAGGCCAGGCGG 630  
Db 941 TCATGGGGGCAACATGACGCGCCAGGCGG 970

## RESULT 8

US-08-757-653-135  
; Sequence 135, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-135

Query Match 74.7%; Score 526.4; DB 2; Length 620;  
Best Local Similarity 89.8%; Pred. No. 1.5e-100;  
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;  
Qy 36 ATCAACATCCGTGTCRGTCTGTCGCGCGATCAAGGAGTTCTTCGGCACCGAGCGAGTGTCC 95  
Db 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACCGAGCGAGTGTGAGC 60  
Qy 96 CAGTTCATGGACGACAAACCGGTGTGGGTCTGACCCACAGCGCGGCTGTGCGCG 155  
Db 61 CAATTTCATGGACGACAAACCGGTGTGGGTGTGACCCACAGCGCGGCTGTGCGCG 120

Qy 156 CTGGGCCGCGGTGCTGTCTCCCGGAGCGGCGCCGCTTGAGGTCCTGTGACGTGACCGTGCACCCG 215  
Db 121 CTGGGGCCGCGGTGCTGTCTACGTGAGCGTGCCGGGTCTGAGGTCGCGACGTCGACCCG 180  
Qy 216 TCSACATACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
Qy 276 GGCTCGGTGTCGCTGTAYAGCGCGGTSAACCGTTTCGGGTTTCATCGAGACCCCGTACCGC 335  
Db 241 GGCTCGGTGTCGCTGTACGCGCGGTCAACCGTTTCGGGTTTCATCGAAACCCCGTACCGC 300  
Qy 336 AAGTGTGTCGACGCGTGTGTCACCGAGATCACTACCTGACCGCGCGACGAGGAGGAC 395  
Db 301 AAGTGTGTCGACGCGTGTGTCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGGAC 360  
Qy 396 CGCCACGTGTCGCGCGAGGCCAACTCGCCGATCGACGACAAAGGCGCGGTTTCGAGGAGKCC 455  
Db 361 CGCCACGTGTCGCGCGAGGCCAACTCGCCGATCGATCGGACGCGTTCGTCGAGCGC 420  
Qy 456 CGGTGTCGTGTCGCGCGAGGCCGAGGTGAGTACGTGACGTGCGCTCGTCCGAGGTGAC 515  
Db 421 CGGTGTCGTGTCGCGCGAGGCCGAGGTGAGTACGTGACGTGCGCTCGTCCGAGGTGAC 480  
Qy 516 TACATGACGTGTCGCGCGCGACAGATGTCGTGTCGCGTGGCCACCGCGATGATCCCGTTCCTC 575  
Db 481 TACATGACGTGTCGCGCGCGACAGATGTCGTGTCGCGTGGCCACCGCGATGATCCCGTTCCTG 540  
Qy 576 GAGCAGCAGCAGCCAAACCGTGTGTCCTGATGGCGCCCAACATGACGCGCGAGCGGTTCG 635  
Db 541 GAGCAGCAGCAGCCAAACCGTGTGTCCTCATGCGGGGCAAAACATGACGCGCGAGCGGTTCGCG 600  
Qy 636 CTGGTGGCAGCGAGGCGCC 655  
Db 601 CTGGTGGTACGAGGCGCC 620

## RESULT 9

US-08-757-653-138/c  
; Sequence 138, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          74.7%; Score 526.4; DB 2; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCRCGTCTGCGGCGATCAAGAGGTTCTTCGGACACAGCCAGCTGTCC 95
DB 620 ATCAACATCCGCGCGTGTGCGCGCATCAAGAGGTTCTTCGGACACAGCCAGCTGAGC 561

QY 96 CAGTTTCATGGACAGAACACCGCTGTGCGGTCTGACCCACAAAGCGCCCTGTGCGGG 155
DB 560 CAATTTCATGGACAGAACACCGCTGTGCGGTGTTGACCCACAAAGCGCGCTGTGCGGG 501

QY 156 CTGGGCGCGGGTGTCTGTCCGGAGCGGGCGCGCTGGAGGTTCGTGACGTGACACCG 215
DB 500 CTGGGCGCGGGTGTCTGTGACGTGAGCGTGTGCGGGCTGGAGGTTCGTGACACCG 441

QY 216 TCSCACTACGCGCGATGTCGCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
DB 440 TCGCACTACGCGCGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GCGTCGCTCTGCGTGTGAYCGCGGGTSAACCCGTTTCGGGTTTCATCGAGACCCCGTACCG 335
DB 380 GACTCGCTCTGCGTGTGACGCGGGTCAACCCGTTTCGGGTTTCATCGAAACCGCTACCG 321

QY 336 AAGTGTGTGACGCGTGTGTACCGACGATGTCACCTACTGACCGCGGAGGAGGAC 395
DB 320 AAGTGTGTGACGCGGCGTGTGTAGCGACGAGATCGTGTACTGACCGCGGAGGAGGAC 261

QY 396 GCGCACGTTGTGCGCGAGCCAACTCGCGATCGACGACCAAGGCGCGTTCGAGGKCC 455
DB 260 GCGCACGTTGTGCGCGAGCCAACTCGCGATCGATGCGGAGCGGTCTGTCGAGCGG 201

QY 456 CGGCTGTCTGTCGCGCGGAGCGGCGAGGTGCGAGTACGTGCTCCCTCGTCCGAGGTGGAC 515
DB 200 CGGCTGTCTGTCGCGCGGAGCGGCGGAGGTGAGTACGTGCTCCCTCGTCTGAGGTGAC 141

QY 516 TACATGAGCTGTGCGCGCGCGAGATGCTGTGCTGGGCGACCGCGATGATCCGTTCTTC 575
DB 140 TACATGAGCTGTGCGCGCGCGAGATGCTGTGCTGGGCGACCGCGATGATCCCTTCTCTG 81

QY 576 GAGCAGGACGCGCAACCGTCCCTGATGGGCGCCACATGACGCGCAGGCGGTTCG 635
DB 80 GAGCAGGACGCGCAACCGTCCCTGATGGGCGCCAAACATGACGCGCAGGCGGTTCGCG 21

QY 636 CTGGTGGCAGCGAGGCGCC 655
DB 20 CTGGTGGCAGCGAGGCGCC 1
```

```
RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF INVENTIONS: 160
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSER: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

```
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match          74.7%; Score 526.4; DB 3; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCRCGTCTGCGGCGATCAAGAGGTTCTTCGGACACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGTGTGTCGCGCATCAAGAGGTTCTTCGGACACAGCCAGCTGAGC 60

QY 96 CAGTTTCATGGACAGAACACCGCTGTGCGGTCTGACCCACAAAGCGCGCTGTGCGGG 155
DB 61 CAATTTCATGGACAGAACACCGCTGTGCGGTGTTGACCCACAAAGCGCGCTGTGCGGG 120

QY 156 CTGGGCGCGGGTGTCTGTCCCGGAGCGGCGCGCTCGGAGGTTCGTGACGTGACCCCG 215
DB 121 CTGGGCGCGGGTGTCTGTACAGTGTGCGGCTGCGGAGTTCGCGAGCTGACCCCG 180

QY 216 TCSCACTACGCGCGATGTCGCGATCGAGACCCCGGAGGTTCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GCGTCGCTCTGCGTGTAYCGCGGGTSAACCCGTTTCGGGTTTCATCGAGACCCCGTACCG 335
DB 241 GCGTCGCTCTGCGTGTACGCGGGTCAACCCGTTTCGGGTTTCATCGAAACCGCTACCG 300

QY 336 AAGTGTGTGACGCGTGTGTCAACGACGAGATGCCACTACCTGACCGCGGAGGAGGAC 395
DB 301 AAGTGTGTGACGCGGCTGTGTAGCGACGAGATCGTGTACTGACCGCGGAGGAGGAC 360

QY 396 GCGCACGTTGTGCGCGAGGCGCAACTCGCGCGATGACGACAAAGGCGCGGTTCGAGGKCC 455
DB 361 GCGCACGTTGTGCGCGAGGCGCAACTTCGCGCGATCGATGCGGAGCGGTTCGTCGAGCGG 420

QY 456 CGGCTGTCTGTCGCGCGGAGCGGCGAGGTTCGAGTACGTGCTCCCTCGTCCGAGGTGGAC 515
DB 421 CGGCTGTCTGTCGCGCGGAGCGGCGGAGGTGAGTACGTGCTCCCTCGTCTGAGGTGGAC 480

QY 516 TACATGAGCTGTGCGCGCGCGAGATGCTGTGCTGGGCGACCGCGATGATCCCGTTCTTC 575
DB 481 TACATGAGCTGTGCGCGCGCGAGATGCTGTGCTGGGCGACCGCGATGATTCCTTCTCTG 540

QY 576 GAGCAGGACGCGCAACCGTCCCTGATGGGCGCCAAACATGACGCGCAGGCGGTTCG 635
DB 541 GAGCAGGACGCGCAACCGTCCCTCATGGGGGCCAAACATGACGCGCAGGCGGTTCGCG 600

QY 636 CTGGTGGCAGCGAGGCGCC 655
DB 20 CTGGTGGCAGCGAGGCGCC 1
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Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match 74.7%; Score 526.4; DB 3; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCRCGTGTCGGCGCGATCAAGGAGTTCTTCGGCACCGACGCTGTCC 95
Db 620 ATCAACATCCGCGCGTGTGCGCCGATCAAGGAGTTCTTCGGCACCGACGCTGAGC 561

Qy 96 CAGTTCATGGACAGAAACAACCGCTGTGGGTCTGACCCACAAGCGCGCTGTGCGCG 155
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Qy 216 TCSACTACGGCCGGATGTGCCCGATCGAGACCCGGAGGGTCCCAACATCGTCTGATC 275
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Qy 396 CGCCACGTSGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGCGCGTTCGAGGAGKCC 455
Db 260 CGCCACGTGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGCTTCGTTCGAGCGG 201

Qy 456 CGGGTGTGTTCCCGCCGSAAGCGGGGAGGTCAAGTACGTGCCCTCTGTCGAGGTGAC 515
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Qy 516 TACATGGACGTGTGCGCGCGCAGATGGTGTGGTGGCCACGCGGATGATCCCGTTCTC 575
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Qy 576 GAGCACGACGACGCAACCGTGCCTGATGGCGCGCAACATCGACGCGCAGCGGTTCG 635
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Qy 636 CTGTGCGCAGCGAGGCGCC 655
Db 20 CTGTGCGTAGCGAGGCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match 74.7%; Score 526.4; DB 4; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCRCGTGTCGGCGCGATCAAGGAGTTCTTCGGCACCGACGCTGTCC 95
Db 1 ATCAACATCCGCGCGTGTGCGCCGATCAAGGAGTTCTTCGGCACCGACGCTGAGC 60
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QY 96 CAGTTTCATGACGACGAGCAACCGGCTGTGGTCTGACCCCAAGGGCGCCCTGTGCGG 155
Db 61 CAATTTCATGACGACGAGCAACCGGCTGTGGTCTGACCCCAAGGGCGCCCTGTGCGG 120
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Db 121 CTGGGCGCGGGTGTCTGTCACTGAGCGTGCCTGGGTGAGGTTCGCGACGTGCACCG 180
QY 216 TCSCACTACGCGCGGATGTCGCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
Db 181 TCSCACTACGCGCGGATGTCGCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 240
QY 276 GCCTCGCTGTGCTGTGTCGCGGGTSAACCGTTCCGGTTTCATCGAGACCCCGTACCG 335
Db 241 GCCTCGCTGTGCTGTGTCGCGGGTSAACCGTTTCGGGTTCATCGAGACCCCGTACCG 300
QY 336 AAGGTGGTGTGCTGTGTCACCGACGAGATCCACTACTACCGCGCGAGGAGGAC 395
Db 301 AAGGTGGTGTGCTGTGTCAGCGAGGTGTAGCGACGAGATCGTACCTGACCGCGAGGAGGAC 360
QY 396 CGCCACGTGTGTCGCGCGAGCCCAACTCGCGATCGAGACCAAGGGCGGTTTCGAGGKCC 455
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QY 456 CGGGTGTGCTGTGTCGCGGSAAGCGCGGAGGTGAGTACGTGCTGTCGAGTGGAC 515
Db 421 CGCGTGTGCTGTGTCGCGCGAGCGCGGAGGTGAGTACGTGCTGTCGAGTGGAC 480
QY 516 TACATGGAGCTGTGTCGCGCGCGAGATGTTGTCGTTGCGCACCGCATGATCCCGTTCCTC 575
Db 481 TACATGGAGCTGTGTCGCGCGCGAGATGTTGTCGTTGCGCACCGCATGATCCCGTTCCTC 540
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Db 541 GAGCAGCAGCAGCCCAACCGTGTGCTGATGGCGCGCAACATGACGCGCGAGCGGTTCG 600
QY 636 CTGGTGGCAGGAGGCGCC 655
Db 601 CTGGTGGCAGGAGGCGCC 620

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RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match

Best Local Similarity 74.7%; Score 526.4; DB 4; Length 620;

Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

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Db 620 ATCAACATCCCGCGGTGTCGCGCGCATCAAGGAGTTCTTCGGCACCAGCCAGCTGTGAC 561
QY 96 CAGTTTCATGGACCAACAACCCGCTGTGCGGTCTGTAGCCCAAGCGCGCCCTGTGCGG 155
Db 560 CAATTCATGGACCAACAACCCGCTGTGCGGTGTGACCCCAAGCGCGCACTGTGCGG 501
QY 156 CTGGGCCCGGGTGTCTGTCCCGGAGCGGGCGCCCTGAGAGTCCGTGACGTGCACCCG 215
Db 500 CTGGGCCCGGGTGTCTGTACGTGAGCGTGCCTGGGCTGAGAGTCCGTGACCGTGCACCCG 441
QY 216 TCSCACTACGCGCGGATGTCGCGCATCGAGACCCCGGAGGGTCCCAACATCGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCGCGCATCGAGAACCCCTGAGGGGCCCAACATCGTCTGATC 381
QY 276 GGTCTGCTGTGCTGTGTATGCGCGGGTSAACCCGTTTCGGGTTTCATCGAGACCCCGTACCG 335
Db 380 GGTCTGCTGTGCTGTGTATGCGCGGGTCAACCCGTTTCGGGTTTCATCGAGACCCCGTACCG 321
QY 336 AAGGTGTGTCAGCGGTGTGTCACCGACGAGATCCACTACTGACCGCGCGACGAGGAGGAC 395
Db 320 AAGGTGTGTCAGCGGTGTGTCACCGACGAGATCCGTGTACTGACCGCGCGACGAGGAGGAC 261
QY 396 CGCCACGCTGTGCGCGCGAGCCCAACTCGCGCATCGAGACCAAGGGCGGTTCCGAGGKCC 455
Db 260 CGCCACGCTGTGTCAGCGGTGTGTCACCGCAATTCGCGCATCGATCGGACGCTGCTTCGACG 201
QY 456 CGGGTGTGTCGCGCGCGAGCGCGCGAGGTTCAGATACGTGCTGCTGCTGCTGCTGCTGCTG 515
Db 200 CGGGTGTGTCGCGCGCGAGCGCGCGAGGTTCAGATACGTGCTGCTGCTGCTGCTGCTGCTG 141
QY 516 TACATGGAGCTGTGTCGCGCGCGAGATGTCGTTGTCGTTGTCGTTGTCGTTGTCGTTGTC 575
Db 140 TACATGGAGCTGTGTCGCGCGCGAGATGTCGTTGTCGTTGTCGTTGTCGTTGTCGTTGTC 81
QY 576 GAGCAGCAGCAGCCCAACCGTGTGATGGCGCGCAACATGACGCGCGAGCGGTTCG 635
Db 80 GAGCAGCAGCAGCCCAACCGTGTGATGGCGCGCAACATGACGCGCGAGCGGTTCG 21
QY 636 CTGGTGGCAGGAGGCGCC 655
Db 20 CTGGTGGCAGGAGGCGCC 1

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RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190



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CORRESPONDENCE ADDRESS:
ADDRESS: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match          74.4%; Score 524.8; DB 2; Length 620;
Best Local Similarity 89.7%; Pred. No. 3.3e-100;
Matches 556; Conservative 6; Mismatches 58; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCRGTGTCGTCGCGCGATCAAGAGGTTCTTCGGCACCAAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGTGTCGCGGATCAAGAGGTTCTTCGGCACCAAGCCAGCTGAGC 60
QY 96 CAGTTTCATGGACCAAGAACACCCGTCGTGGGTCTGACCCACAAGCGCGCGCTGTGCGCG 155
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QY 156 CTGGGCGCGGTGTGTCGTCCCGGAGCGCGCGCTTGGAGGTCCTGAGCTCGTGACCGCG 215
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DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCGTATC 240
QY 276 GGCTCGCTGTGCGGTGTATGCGCGGGTSAACCCGTTCCGGGTTTCATCGAGACCCCGTACCG 335

CORRESPONDENCE ADDRESS:
ADDRESS: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match          74.4%; Score 524.8; DB 2; Length 620;
Best Local Similarity 89.7%; Pred. No. 3.3e-100;
Matches 556; Conservative 6; Mismatches 58; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCRGTGTCGTCGCGCGATCAAGAGGTTCTTCGGCACCAAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGTGTCGCGGATCAAGAGGTTCTTCGGCACCAAGCCAGCTGAGC 60
QY 96 CAGTTTCATGGACCAAGAACACCCGTCGTGGGTCTGACCCACAAGCGCGCGCTGTGCGCG 155
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QY 396 CGCCACGTSGTGGCGCAGGCCAACTCGCGGATCGACGACAAGGGCGCGTTCGAGGAGGCC 455
DB 361 CGCCACGTTGTGGCAGAGCCAACTTCGCCGATCGATGCGGACGCTGCTTGTGTCGAGCGG 420
QY 456 CGGGTGTGTCGCGCGGAGCGCGGAGGTGTCGATGTCGTCCTCTGTCGAGTGGAC 515
DB 421 CGCGTGTGTCGCGCGGAGCGCGGAGGTGTCGATGTCGTCCTCTGTCGAGTGGAC 480
QY 516 TACATGGACGTCGTCGCGCGCAGATGTGTGCGGTGGCCACCGCGATGATCCCGTTCTCTC 575
DB 481 TACATGGACGTCGTCGCGCGCAGATGTGTGCGGTGGCCACCGCGATGATCCCTTCTCTG 540
QY 576 GAGCACGACGACCCCAACCGTCTGATGGCGGCCCAACATGACGCGCGCGGCTTCG 635
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Qy	336	AAGGTGGTCGACGGTGTGTGTACCGACGAGATCCACTACTGACCGCCGACGAGAGGAC	395
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Qy	396	CGCCACGTSGTGGCGCAGGCCAACTCGCCGATCGACGACAAGGGCCGGTTCGAGGAGKCC	455
Db	361	CGCCACGTTGGTGGACAGGCCCAATTGCGCGATCGATGCGGACGGTTCGTCGAGCCG	420
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Qy	636	CTGGTGGCAGCGAGCGGCC	655
Db	601	CTGGTCCGTAGCGAGGCCCC	620

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

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(without alignments)  
10213.139 Million cell updates/sec

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Perfect score: 705  
Sequence: 1 cccaggagctggagcgatc.....ggcgatcagcgcgagct 705

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 3271544945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0  
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Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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SUMMARIES

Result No.	Score	Query Match	ID	Description
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2	691	98.0	705	Sequence 10, Appl
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4	691	98.0	705	Sequence 5, Appl
5	691	98.0	705	Sequence 6, Appl
6	691	98.0	705	Sequence 7, Appl
7	691	98.0	705	Sequence 8, Appl
7	691	98.0	705	Sequence 9, Appl

8	691	98.0	705	9	US-09-285-306-12	Sequence 12, Appl
9	691	98.0	705	9	US-09-285-306-13	Sequence 13, Appl
10	691	98.0	705	9	US-09-285-306-14	Sequence 14, Appl
11	691	98.0	705	9	US-09-285-306-16	Sequence 16, Appl
12	691	98.0	705	9	US-09-285-306-24	Sequence 24, Appl
13	689.4	97.8	705	9	US-09-285-306-17	Sequence 17, Appl
14	683	96.9	705	9	US-09-285-306-3	Sequence 3, Appl
15	683	96.9	705	9	US-09-285-306-11	Sequence 11, Appl
16	677	96.0	3444	17	US-10-282-122A-25737	Sequence 25737, A
17	675	95.7	705	9	US-09-285-306-87	Sequence 87, Appl
18	675	95.7	705	9	US-09-285-306-88	Sequence 88, Appl
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20	675	95.7	705	9	US-09-285-306-92	Sequence 92, Appl
21	675	95.7	705	9	US-09-285-306-96	Sequence 96, Appl
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23	673.4	95.5	705	9	US-09-285-306-86	Sequence 86, Appl
24	673.4	95.5	705	9	US-09-285-306-93	Sequence 93, Appl
25	673.4	95.5	705	9	US-09-285-306-94	Sequence 94, Appl
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27	673	95.5	687	9	US-09-285-306-18	Sequence 18, Appl
28	673	95.5	687	9	US-09-285-306-19	Sequence 19, Appl
29	673	95.5	687	9	US-09-285-306-20	Sequence 20, Appl
30	673	95.5	687	9	US-09-285-306-21	Sequence 21, Appl
31	673	95.5	687	9	US-09-285-306-22	Sequence 22, Appl
32	673	95.5	687	9	US-09-285-306-23	Sequence 23, Appl
33	673	95.5	687	9	US-09-285-306-25	Sequence 25, Appl
34	673	95.5	687	9	US-09-285-306-27	Sequence 27, Appl
35	671.8	95.3	705	9	US-09-285-306-85	Sequence 85, Appl
36	671.8	95.3	705	9	US-09-285-306-89	Sequence 89, Appl
37	671.8	95.3	705	9	US-09-285-306-91	Sequence 91, Appl
38	668.6	94.8	705	9	US-09-285-306-143	Sequence 143, App
39	667	94.6	705	9	US-09-285-306-144	Sequence 144, App
40	657	93.2	687	9	US-09-285-306-100	Sequence 100, App
41	655.8	93.0	705	9	US-09-285-306-181	Sequence 181, App
42	655.4	93.0	687	9	US-09-285-306-99	Sequence 99, Appl
43	653.8	92.7	687	9	US-09-285-306-98	Sequence 98, Appl
44	652.2	92.5	687	9	US-09-285-306-97	Sequence 97, Appl
45	650.6	92.3	687	9	US-09-285-306-146	Sequence 146, App

ALIGNMENTS

RESULT 1  
US-09-285-306-10  
; Sequence 10, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285.306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0 .  
; SEQ ID NO 10  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-10

Query Match	99.6%	Score 702.2	DB 9	Length 705
Best Local Similarity	100.0%	Pred. No. 7.8e-156		
Matches	705	Conservative	0	Mismatches 0; Indels 0; Gaps 0
Qy	1	CCCAGGAGCTGGAGCGGATCACACCGAGACCCCTGATCAACATCCGTCGTCGGCGG	60	
Db	1	CCCAGGAGCTGGAGCGGATCACACCGAGACCCCTGATCAACATCCGTCGTCGGCGG	60	





```

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGGGATCACACCGCAGACCCCTGATCAACATCCGTCCGTTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGGGATCACACCGCAGACCCCTGATCAACATCCGTCCGTTCGTGGCGG 60

Qy 61 CGATCAAGAGATTCTTTGGCAGCCACCGACAGCTGTCTCCAGTTCAATGACACAGAACACCGC 120
Db 61 CGATCAAGAGATTCTTTGGCAGCCACCGACAGCTGTCTCCAGTTCAATGACACAGAACACCGC 120

Qy 121 TGTCCGGCTTGACCCACAAAGCCGCCCTGTCCGGCGCTCGGCCCGGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAAGCCGCCCTGTCCGGCGCTCGGCCCGGGTGTCTGTCCCGGG 180

Qy 181 AGCGGGCCGGCTTGAGGTTCGTGAGTGCACCGTCCACCTGACCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGCTTGAGGTTCGTGAGTGCACCGTCCACCTGACCGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCTGCTGTATGCCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCTGCTGTATGCCGGG 300

Qy 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTCAAC 360
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTCAAC 360

Qy 361 ACGAGATCACTACCTGACCGCGCAGAGAGGACCGCAGTGTGTCGCGAGGCCAACT 420
Db 361 ACGAGATCACTACCTGACCGCGCAGAGAGGACCGCAGTGTGTCGCGAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGCGTTTCGAGGAGKCCCGGCTGCTGTCGCGGSAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGAGGAGKCCCGGCTGCTGTCGCGGSAAGCGG 480

Qy 481 GCGAGGTTCGAGTACGTCCTGTCGAGAGTGGACTACATGAGACGATGTGCGCGGCCAGA 540
Db 481 GCGAGGTTCGAGTACGTCCTGTCGAGAGTGGACTACATGAGACGATGTGCGCGGCCAGA 540

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGCCAACCGTGGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGCCAACCGTGGCC 600

Qy 601 TGATGGCGGCCAACATGACGAGCGCAGGCGTTCCGCTGCTGCGCAGCAGCGCGCTGG 660
Db 601 TGATGGCGGCCAACATGACGAGCGCAGGCGTTCCGCTGCTGCGCAGCAGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705

```

```

RESULT 6
US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium

```

```

US-09-285-306-8
Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGGGATCACACCGCAGACCCCTGATCAACATCCGTCCGTTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGGGATCACACCGCAGACCCCTGATCAACATCCGTCCGTTCGTGGCGG 60

Qy 61 CGATCAAGAGATTCTTTGGCAGCCACCGACAGCTGTCTCCAGTTCAATGACACAGAACACCGC 120
Db 61 CGATCAAGAGATTCTTTGGCAGCCACCGACAGCTGTCTCCAGTTCAATGACACAGAACACCGC 120

Qy 121 TGTCCGGCTTGACCCACAAAGCCGCCCTGTCCGGCGCTCGGCCCGGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAAGCCGCCCTGTCCGGCGCTCGGCCCGGGTGTCTGTCCCGGG 180

Qy 181 AGCGGGCCGGCTTGAGGTTCGTGACGTGCACCGTCCACCTGACCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGCTTGAGGTTCGTGACGTGCACCGTCCACCTGACCGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCTGCTGTATGCCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCTGCTGTATGCCGGG 300

Qy 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTCAAC 360
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTCAAC 360

Qy 361 ACGAGATCACTACCTGACCGCGCAGAGAGGACCGCAGTGTGTCGCGAGGCCAACT 420
Db 361 ACGAGATCACTACCTGACCGCGCAGAGAGGACCGCAGTGTGTCGCGAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGCGTTTCGAGGAGKCCCGGCTGCTGTCGCGGSAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGAGGAGKCCCGGCTGCTGTCGCGGSAAGCGG 480

Qy 481 GCGAGGTTCGAGTACGTCCTGTCGAGAGTGGACTACATGAGACGATGTGCGCGGCCAGA 540
Db 481 GCGAGGTTCGAGTACGTCCTGTCGAGAGTGGACTACATGAGACGATGTGCGCGGCCAGA 540

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGCCAACCGTGGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGCCAACCGTGGCC 600

Qy 601 TGATGGCGGCCAACATGACGAGCGCAGGCGTTCCGCTGCTGCGCAGCAGCGCGCTGG 660
Db 601 TGATGGCGGCCAACATGACGAGCGCAGGCGTTCCGCTGCTGCGCAGCAGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705

```

```

RESULT 7
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705

```

```
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-9

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCAGAGCTGAGGCGATCACACCGCAGACCTGATCAACATCCGTTCGTCGTGGCGG 60
   |||||
Db 1 CCAGAGCTGAGGCGATCACACCGCAGACCTGATCAACATCCGTTCGTCGTGGCGG 60
   |||||
QY 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGACACCCGC 120
   |||||
Db 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGACACCCGC 120
   |||||
QY 121 TGTGGGTCTGACCCACAAGCGCGCTGTGGCGCTGGGCGCGGTGTCTGCCGG 180
   |||||
Db 121 TGTGGGTCTGACCCACAAGCGCGCTGTGGCGCTGGGCGCGGTGTCTGCCGG 180
   |||||
QY 181 AGCGGCCCGGCTGAGGCTCCAGCTGACGTGACACCCCTGCTGACGCGGATGTGCCGA 240
   |||||
Db 181 AGCGGCCCGGCTGAGGCTCCAGCTGACGTGACACCCCTGCTGACGCGGATGTGCCGA 240
   |||||
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGGCGGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGGCGGG 300
   |||||
QY 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGTGTGTCAGCGTGTGGTCAACG 360
   |||||
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGTGTGTCAGCGTGTGGTCAACG 360
   |||||
QY 361 ACAGATCCACTACTGACCGCGCAGAGGAGACCGCCACCGTGTGGCGAGGCCAACT 420
   |||||
Db 361 ACAGATCCACTACTGACCGCGCAGAGGAGACCGCCACCGTGTGGCGAGGCCAACT 420
   |||||
QY 421 CGCCGATCGACGACAAGGGCGGTTTCGAGGAGKCCCGGTTGCTGTCGCGCSAAGGCGG 480
   |||||
Db 421 CGCCGATCGACGACAAGGGCGGTTTCGAGGAGKCCCGGTTGCTGTCGCGCSAAGGCGG 480
   |||||
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGACTACATGACAGCTGTGTCGCGCGCAGA 540
   |||||
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGACTACATGACAGCTGTGTCGCGCGCAGA 540
   |||||
QY 541 TGGTGTGCGTGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCAACCGTGCCC 600
   |||||
Db 541 TGGTGTGCGTGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCAACCGTGCCC 600
   |||||
QY 601 TGATGGCGCCACATGACGCGCCAGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 660
   |||||
Db 601 TGATGGCGCCACATGACGCGCCAGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 660
   |||||
QY 661 TGGGCACCGGATGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
   |||||
Db 661 TGGGCACCGGATGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
   |||||
```

## RESULT 8

```
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

## RESULT 9

```
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; SOFTWARE: FastSeq for Windows Version 3.0
```

```
; SEQ ID NO 12
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCAGAGCTGAGGCGATCACACCGCAGACCTGATCAACATCCGTTCGTCGTGGCGG 60
   |||||
Db 1 CCAGAGCTGAGGCGATCACACCGCAGACCTGATCAACATCCGTTCGTCGTGGCGG 60
   |||||
QY 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGACACCCGC 120
   |||||
Db 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGACACCCGC 120
   |||||
QY 121 TGTGGGTCTGACCCACAAGCGCGCTGTGGCGCTGGGCGCGGTGTCTGCCGG 180
   |||||
Db 121 TGTGGGTCTGACCCACAAGCGCGCTGTGGCGCTGGGCGCGGTGTCTGCCGG 180
   |||||
QY 181 AGCGGCCCGGCTGAGGCTCCAGCTGACGTGACACCCCTGCTGACGCGGATGTGCCGA 240
   |||||
Db 181 AGCGGCCCGGCTGAGGCTCCAGCTGACGTGACACCCCTGCTGACGCGGATGTGCCGA 240
   |||||
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGGCGGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGGCGGG 300
   |||||
QY 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGTGTGTCAGCGTGTGGTCAACG 360
   |||||
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGTGTGTCAGCGTGTGGTCAACG 360
   |||||
QY 361 ACAGATCCACTACTGACCGCGCAGAGGAGACCGCCACCGTGTGGCGAGGCCAACT 420
   |||||
Db 361 ACAGATCCACTACTGACCGCGCAGAGGAGACCGCCACCGTGTGGCGAGGCCAACT 420
   |||||
QY 421 CGCCGATCGACGACAAGGGCGGTTTCGAGGAGKCCCGGTTGCTGTCGCGCSAAGGCGG 480
   |||||
Db 421 CGCCGATCGACGACAAGGGCGGTTTCGAGGAGKCCCGGTTGCTGTCGCGCSAAGGCGG 480
   |||||
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGACTACATGACAGCTGTGTCGCGCGCAGA 540
   |||||
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGACTACATGACAGCTGTGTCGCGCGCAGA 540
   |||||
QY 541 TGGTGTGCGTGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCAACCGTGCCC 600
   |||||
Db 541 TGGTGTGCGTGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCAACCGTGCCC 600
   |||||
QY 601 TGATGGCGCCACATGACGCGCCAGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 660
   |||||
Db 601 TGATGGCGCCACATGACGCGCCAGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 660
   |||||
QY 661 TGGGCACCGGATGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
   |||||
Db 661 TGGGCACCGGATGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
   |||||
```

; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 13  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-13

Query Match 98.0%; Score 691; DB 9; Length 705;  
 Best Local Similarity 98.0%; Pred. No. 3.3e-153;  
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;  
 QY 1 CCCAGGAGCTGAGGCGATCACACGCGCAGACCTGATCAACATCCGTCGTCGTCGCGG 60  
 Db 1 CCCAGGAGCTGAGGCGATCACACGCGCAGACCTGATCAACATCCGTCGTCGTCGCGG 60  
 QY 61 CGATCAAGGAGTCTTTCGGGACACGAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120  
 Db 61 CGATCAAGGAGTCTTTCGGGACACGAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120  
 QY 121 TGTGGGCTGTGACCAAGCGCCGCTGTGCGGCTGCGGCTGCGGCTGCTGTCGCGG 180  
 Db 121 TGTGGGCTGTGACCAAGCGCCGCTGTGCGGCTGCGGCTGCGGCTGCTGTCGCGG 180  
 QY 181 AGCGGGCGGCTGAGGCTCGTGACGTGACCCGCTGACCTGACGCGCGGATGTGCCCGA 240  
 Db 181 AGCGGGCGGCTGAGGCTCGTGACGTGACCCGCTGACCTGACGCGCGGATGTGCCCGA 240  
 QY 241 TCGAGACCCGAGGCTCCAAACATCGGTTCGATCGGTCGCTGTCGTCGTCGTCGTCG 300  
 Db 241 TCGAGACCCGAGGCTCCAAACATCGGTTCGATCGGTCGCTGTCGTCGTCGTCGTCG 300  
 QY 301 TSAACCCGTCGGGTTTCAGAGACCCGTCACCGCAAGGTGTCACCGTGTGTCACCG 360  
 Db 301 TSAACCCGTCGGGTTTCAGAGACCCGTCACCGCAAGGTGTCACCGTGTGTCACCG 360  
 QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGTGTGTCGCGCAGGCGCAACT 420  
 Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGTGTGTCGCGCAGGCGCAACT 420  
 QY 421 CGCCGATCGACGACAAGGCGCGGTTTCGAGAGAGKCCCGGTCGTCGTCGTCGTCGTCG 480  
 Db 421 CGCCGATCGACGACAAGGCGCGGTTTCGAGAGAGKCCCGGTCGTCGTCGTCGTCGTCG 480  
 QY 481 GCGAGGTCGAGTACCTGTCGTCGAGGTGGAATCATGAGAGTGTGTCGCGCGCCAGA 540  
 Db 481 GCGAGGTCGAGTACCTGTCGTCGAGGTGGAATCATGAGAGTGTGTCGCGCGCCAGA 540  
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGCCC 600  
 Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGCCC 600  
 QY 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTTCGCTGTCGTCGTCGTCGTCGTCGTCG 660  
 Db 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTTCGCTGTCGTCGTCGTCGTCGTCGTCG 660  
 QY 661 TGGGCACCGCATGAGCTGCGCGCGCATGACGCGCGGACGT 705  
 Db 661 TGGGCACCGCATGAGCTGCGCGCGCATGACGCGCGGACGT 705

RESULT 10  
 US-09-285-306-14  
 ; Sequence 14, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 14  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-14

Query Match 98.0%; Score 691; DB 9; Length 705;  
 Best Local Similarity 98.0%; Pred. No. 3.3e-153;  
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;  
 QY 1 CCCAGGAGCTGAGGCGATCACACGCGCAGACCTGATCAACATCCGTCGTCGTCGCGG 60  
 Db 1 CCCAGGAGCTGAGGCGATCACACGCGCAGACCTGATCAACATCCGTCGTCGTCGCGG 60  
 QY 61 CGATCAAGGAGTCTTTCGGGACACGAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120  
 Db 61 CGATCAAGGAGTCTTTCGGGACACGAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120  
 QY 121 TGTGGGCTGTGACCAAGCGCCGCTGTGCGGCTGCGGCTGCGGCTGCTGTCGTCGCGG 180  
 Db 121 TGTGGGCTGTGACCAAGCGCCGCTGTGCGGCTGCGGCTGCGGCTGCTGTCGTCGCGG 180  
 QY 181 AGCGGGCGGCTGAGGCTCGTGACGTGACCCGCTGACCTGACGCGCGGATGTGCCCGA 240  
 Db 181 AGCGGGCGGCTGAGGCTCGTGACGTGACCCGCTGACCTGACGCGCGGATGTGCCCGA 240  
 QY 241 TCGAGACCCGAGGCTCCAAACATCGGTTCGATCGGTCGCTGTCGTCGTCGTCGTCG 300  
 Db 241 TCGAGACCCGAGGCTCCAAACATCGGTTCGATCGGTCGCTGTCGTCGTCGTCGTCG 300  
 QY 301 TSAACCCGTCGGGTTTCATGAGACCCGTCACCGCAAGGTGTCGACGTCGTCGTCACCG 360  
 Db 301 TSAACCCGTCGGGTTTCATGAGACCCGTCACCGCAAGGTGTCGACGTCGTCGTCACCG 360  
 QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGTGTGTCGCGCAGGCGCAACT 420  
 Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGTGTGTCGCGCAGGCGCAACT 420  
 QY 421 CGCCGATCGACGACAAGGCGCGGTTTCGAGAGAGKCCCGGTCGTCGTCGTCGTCGTCG 480  
 Db 421 CGCCGATCGACGACAAGGCGCGGTTTCGAGAGAGKCCCGGTCGTCGTCGTCGTCGTCG 480  
 QY 481 GCGAGGTCGAGTACCTGTCGTCGAGGTGGAATCATGAGAGTGTGTCGCGCGCCAGA 540  
 Db 481 GCGAGGTCGAGTACCTGTCGTCGAGGTGGAATCATGAGAGTGTGTCGCGCGCCAGA 540  
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGCCC 600  
 Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGCCC 600  
 QY 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTTCGCTGTCGTCGTCGTCGTCGTCGTCG 660  
 Db 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTTCGCTGTCGTCGTCGTCGTCGTCGTCG 660  
 QY 661 TGGGCACCGCATGAGCTGCGCGCGCATGACGCGCGGACGT 705  
 Db 661 TGGGCACCGCATGAGCTGCGCGCGCATGACGCGCGGACGT 705

RESULT 11  
 US-09-285-306-16  
 ; Sequence 16, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US



```

; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCCAGACCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCRGTCGTGGCGG 60
DB 1 CCCAGACCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTCGGGACACGACGAGTGTCCAGTTTCATGACACGAAACAACCCGC 120
DB 61 CGATCAAGAGTTCTTCGGGACACGACGAGTGTCCAGTTTCATGACACGAAACAACCCGC 120
QY 121 TGTGGGTCTGACCAACAGCCGCGCTGTCCGCGCTGGCGCGGTGGTCTGTCCCGG 180
DB 121 TGTGGGTCTGACCAACAGCCGCGCTGTCCGCGCTGGCGCGGTGGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCCTGACGTCACCGTCSCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCCTGACGTCACCGTCSCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGGTTCGTTGATGCGCGG 300
DB 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGGTTCGTTGATGCGCGG 300
QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACCG 360
DB 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACCG 360
QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCCGCACTGTCGCGGAGGCCAACT 420
DB 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCCGCACTGTCGCGGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGAGAGGKCCCGGCTGCTGTCGCGSAAAGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGCGTTTCGAGAGGKCCCGGCTGCTGTCGCGSAAAGCGG 480
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
DB 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACCCGTCGCC 600
DB 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACCCGTCGCC 600
QY 601 TGATGGCGCCAAATGACGACGCGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
DB 601 TGATGGCGCCAAATGACGACGCGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
DB 661 TGGGCAACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

```

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RESULT 12
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.

```

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; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCRGTCGTGGCGG 60
DB 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTCGGGACACGACGAGTGTCCAGTTTCATGACACGAAACAACCCGC 120
DB 61 CGATCAAGAGTTCTTCGGGACACGACGAGTGTCCAGTTTCATGACACGAAACAACCCGC 120
QY 121 TGTGGGTCTGACCAACAGCCGCGCTGTCCGCGCTGGCGCGGTGGTCTGTCCCGG 180
DB 121 TGTGGGTCTGACCAACAGCCGCGCTGTCCGCGCTGGCGCGGTGGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGTTCGTCGTCGACGTCGCGCTCGGTTCGTTGATGCGCGG 240
DB 181 AGCGGCGCGGCTGGAGTTCGTCGTCGACGTCGCGCTCGGTTCGTTGATGCGCGG 240
QY 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGGTTCGTTGATGCGCGG 300
DB 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGGTTCGTTGATGCGCGG 300
QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACCG 360
DB 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACCG 360
QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCCGCACTGTCGCGGAGGCCAACT 420
DB 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCCGCACTGTCGCGGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGAGAGGKCCCGGCTGCTGTCGCGSAAAGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGCGTTTCGAGAGGKCCCGGCTGCTGTCGCGSAAAGCGG 480
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
DB 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACCCGTCGCC 600
DB 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACCCGTCGCC 600
QY 601 TGATGGCGCCAAATGACGACGCGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
DB 601 TGATGGCGCCAAATGACGACGCGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
DB 661 TGGGCAACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

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RESULT 13
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Affymetrix, Inc.

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; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      97.8%; Score 689.4; DB 9; Length 705;
Best Local Similarity 97.9%; Pred. No. 7.9e-153;
Matches 690; Conservative 7; Mismatches 8; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCRGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACTGTGGCGG 60

Qy 61 CGATCAAGAGGTTCTTCGGCACCCAGCCAGCTGTGCCAGTTTCATGACCAACACCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACCCAGCCAGCTGTGCCAGTTTCATGACCAACACCCGC 120

Qy 121 TGTCCGGTCTGACCCACAAAGCCGCCCTGTGGCCGCTGGCCCGGGTGGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAAGCCGCCCTGTGGCCGCTGGCCCGGGTGGTCTGTCCCGG 180

Qy 181 AGCGGGCGGGCTGGAGGTCCTGAGCTGCACCCCTGSCACTACCGCCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCCTGAGCTGCACCCCTGSCACTACCGCCGGATGTGCCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCGATCGGTCGCTGTGCGGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCGATCGGTCGCTGTGCGGTATGCGCGG 300

Qy 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCACGGTGTGTACCG 360
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCACGGTGTGTACCG 360

Qy 361 ACAGATCCACTACCTGACCCGCGAGGAGCCGCCACGTSGTGGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCCGCGAGGAGCCGCCACGTSGTGGCGCAGGCCAACT 420

Qy 421 CGCGGATCGACGACAAAGGCGCGGTTTCGAGGAGKCCCGGGTGTGTTCCCGCGSAAAGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGCGGTTTCGCGGAGGCGCGGTTGTGTTCCCGCGCAAGCGG 480

Qy 481 CGGAGGTGAGTACGTGCCCTGTCGAGGTGGACTACATGGAAGTGTGTCGCGCGCCAGA 540
Db 481 CGGAGGTGAGTACGTGCCCTGTCGAGGTGGACTACATGGAAGTGTGTCGCGCGCCAGA 540

Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGCACGACGCCAACCGTGCCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGCACGACGCCAACCGTGCCC 600

Qy 601 TGATGGGCGCCAAATGACAGCCAGGCGGTTCCGCTGTGGCGCAGGAGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACAGCCAGGCGGTTCCGCTGTGGCGCAGGAGCGCGCTGG 660

Qy 661 TGGGCACCGGCATGAGTGTGGCGCGCGGATCGACGCGCGACGT 705
Db 661 TGGGCACCGGCATGAGTGTGGCGCGCGGATCGACGCGCGACGT 705
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RESULT 14

US-09-285-306-3

; Sequence 3, Application US/09285306A

; Publication No. US20020187467A1

```
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
; US-09-285-306-3
```

```
Query Match      96.9%; Score 683; DB 9; Length 705;
Best Local Similarity 96.9%; Pred. No. 2.5e-151;
Matches 683; Conservative 10; Mismatches 12; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCRGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCGTGCGCGG 60

Qy 61 CGATCAAGAGTTCCTTCGGCACCCAGCCAGCTGTGCCAGTTTCATGGAACAGAACCCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACCCAGCCAGCTGTGCCAGTTTCATGGAACAGAACCCGC 120

Qy 121 TGTCCGGTCTGACCCACAAAGCCGCCCTGTGGCCGCTGGGCCCGGGTGGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAAGCCGCCCTGTGGCCGCTGGGCCCGGGTGGTCTGTCCCGG 180

Qy 181 AGCGGGCGGGCTGGAGGTCCTGAGCTGCACCCCTGSCACTACCGCCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCCTGAGCTGCACCCCTGSCACTACCGCCGGATGTGCCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCGATCGGTCGCTGTGCGGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCGATCGGTCGCTGTGCGGTATGCGCGG 300

Qy 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGAGTGTGTGTACCG 360
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGAGTGTGTGTACCG 360

Qy 361 ACAGATCCACTACCTGACCCGCGAGGAGCCGCCACGTSGTGGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCCGCGAGGAGCCGCCACGTSGTGGCGCAGGCCAACT 420

Qy 421 CGCGGATCGACGACAAAGGCGCGGTTTCGAGGAGKCCCGGGTGTGTTCCCGCGSAAAGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGCGGTTTCGCGGAGGCGCGGTTGTGTTCCCGCGCAAGCGG 480

Qy 481 GCGAGGTGAGTACGTGCCCTGTCGAGGTGGACTACATGGAAGTGTGTCGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCCCTGTCGAGGTGGACTACATGGAAGTGTGTCGCGCGCCAGA 540

Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGCACGACGCCAACCGTGCCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGCACGACGCCAACCGTGCCC 600

Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGCACGACGCCAACCGTGCCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGCACGACGCCAACCGTGCCC 600

Qy 601 TGATGGGCGCCAAATGACAGCCAGGCGGTTCCGCTGTGGCGCAGGAGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACAGCCAGGCGGTTCCGCTGTGGCGCAGGAGCGCGCTGG 660

Qy 601 TGATGGGCGCCAAATGACAGCCAGGCGGTTCCGCTGTGGCGCAGGAGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACAGCCAGGCGGTTCCGCTGTGGCGCAGGAGCGCGCTGG 660
```

QY 661 TGGGACCGCGCATGGAGCTCGCGCGCGCATCGACCGCGGACGT 705  
Db 661 TGGGACCGCGCATGGAGCTCGCGCGCGCATCGACCGCGGACGT 705

## RESULT 15

US-09-285-306-11  
; Sequence 11, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 11  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
; FEATURE:  
; NAME/KEY: modified base  
; LOCATION: (42)...(42)  
; OTHER INFORMATION: n = g,a,c or t  
; FEATURE:  
; NAME/KEY: modified base  
; LOCATION: (692)...(692)  
; OTHER INFORMATION: n = g,a,c or t

US-09-285-306-11

Query Match 96.9%; Score 683; DB 9; Length 705;  
Best Local Similarity 97.3%; Pred. No. 2.5e-151;  
Matches 686; Conservative 6; Mismatches 13; Indels 0; Gaps 0;  
QY 1 CCCAGGACGTGAGGGGATCACACGACAGACCTGATCAACATCCGTCCRGTCGTGGGG 60  
Db 1 CCCAGGACGTGAGGGGATCACACGACAGACCTGATCAACATCCGTCCCGTCGTGGGG 60  
QY 61 CGATCAAGGAGTTCTTCGGCACACGACAGCTGTCCAGTTTCATGGACACAGAAACCCGC 120  
Db 61 CGATCAAGGAGTTCTTCGGCACACGACAGCTGTCCAGTTTCATGGACACAGAAACCCGC 120  
QY 121 TGTGGGTCTGACCCACAGCGCGGCTGTGGCGGTGGGCGGCTGTCTGTCCCGGG 180  
Db 121 TGTGGGGTCTACCCACAGCGCGGCTGTGGCGGTGGGCGGCTGTCTGTCCCGGG 180  
QY 181 AGCGGGCGGCTGAGGTCCTGAGTGCACCGTCCACTACGCGCGGATGTCGCCGA 240  
Db 181 AGCGGGCGGCTGAGGTCCTGAGTGCACCGTCCACTACGCGCGGATGTCGCCGA 240  
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGTCGCTGCGGTGTAYGCGCGGG 300  
Db 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGTCGCTGCGGTGTACGCGGG 300  
QY 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGAAGGTGTGACCGTGTGTTACCG 360  
Db 301 TGAACCCGTTCCGGTTTCATCGAGACCCCGTACCGAAGGTGTGACCGCGTGTGTTACCG 360  
QY 361 ACGAGATCCACTTACCTGACCGCGGAGGAGCGCCACGTSGTGGCGAGGCCAACT 420  
Db 361 ACGAGATCCACTTACCTGACCGCGGAGGAGCGCCACGTSGTGGCGAGGCCAACT 420  
QY 421 CGCCGATCGACGACAGGCGCGTTTCGAGGAGKCCCGGTGTGTTCCGCGSAAAGGGG 480  
Db 421 CGCCGATCGACGACAGGCGCGTTTCGAGGAGKCCCGGTGTGTTCCGCGSAAAGGGG 480  
QY 481 GCGAGGTGAGTACGTGCGCTCTGTCGAGGTGGAATACATGAGACGTGTGCGCGGCCAGA 540

Db 481 GCGAGGTGAGTACGTGCGCTCTGTCGAGGTGGAATACATGAGACGTGTGCGCGGCCAGA 540  
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCACGACGACGCAACCGTGGCC 600  
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCACGACGACGCAACCGTGGCC 600  
QY 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGGTGGCAGCGAGGCGCGCTGG 660  
Db 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGGTGGCAGCGAGGCGCGCTGG 660  
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705  
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATNGACGCGGCGACGT 705

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Job time : 453.661 secs

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